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# **Index of hosts and associated fungi identified by the Forest Insect and Disease Survey in Ontario from 1967 to 1987. II. conifers other than pines**

C.N. Davis and D.T. Myren

Information Report O-X-406  
Ontario Region



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**INDEX OF HOSTS AND ASSOCIATED FUNGI IDENTIFIED BY THE FOREST INSECT  
AND DISEASE SURVEY IN ONTARIO FROM 1967 TO 1987.**

**II. CONIFERS OTHER THAN PINES**

**C.N. DAVIS AND D.T. MYREN**

**FORESTRY CANADA  
ONTARIO REGION  
GREAT LAKES FORESTRY CENTRE  
1990**

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#### ABSTRACT

This publication lists all fungi found on conifers other than pine hosts from 1967 to 1987 by personnel of the Forest Insect and Disease Survey (FIDS) Unit at the Great Lakes Forestry Centre. The list is arranged first by host and then by organism. An index of common names of hosts and of diseases provides the reader who is not familiar with all of the Latin binomials with access to the appropriate pages in the lists. A comprehensive index of all Latin binomials, including frequently used synonyms, is included.

#### RÉSUMÉ

Les auteurs ont dressé la liste de tous les champignons observés sur des conifères sauf les pins par le personnel de la section du Relevé des insectes et des maladies des arbres (RIMA) du Centre de foresterie des Grands Lacs de 1967 à 1987. La liste est divisée par hôte et par agent. La publication renferme un indexe des noms communs des hôtes et des maladies, qui permet au lecteur non familier avec tous les noms latins de trouver les pages voulues, ainsi qu'un index compréhensif de tous les noms latins, y compris les synonymes fréquemment employés.

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## INTRODUCTION

This index is the second in a series of indices prepared by the mycology section of the Forest Insect and Disease Survey (FIDS) Unit and covers all conifers other than pine. The first index in the series covered the genus *Pinus*.

The information presented in these indices of fungi and their hosts was obtained from the FIDS data bank maintained at the Petawawa National Forestry Institute. This data bank contains detailed records of each tree disease collection made by FIDS staff since 1967. Information from the Great Lakes Forestry Centre (GLFC) extension sample records not contained in the data bank is included. Most of the samples in our extension records were collected by staff of the Ontario Ministry of Natural Resources (OMNR).

This index has been prepared so as to ensure that at least some of the information in our data bank is available to the forestry community at large. Additional indices will be prepared over the next several years to cover all tree species native to Ontario; some of the more widely planted exotics will also be included.

The text consists of two major divisions. In the first the hosts are arranged in alphabetical order by their Latin binomials. In the second, the organisms are arranged in a similar fashion. These divisions are followed by alphabetical lists of the common names of both the hosts and the diseases, with the corresponding Latin binomials. By consulting these lists for names that may be more familiar, the reader will gain access to the binomials in the main body of the text. An index of all Latin binomials, including anamorphs and synonyms, has also been included.

Many of the fungi presented are not true pathogens but have been found on the hosts as saprophytes. Others are known to be either weakly or vigorously pathogenic. To simplify attempts to recognize the category to which a fungus belongs, we have assigned a number according to the following system, which is used in the annual FIDS reports:

## DISEASE RATING

1. Capable of causing serious injury to or death of living trees.
2. Capable of causing sporadic or local injury but not usually a threat to living trees.
3. Of minor importance and not known to have caused serious damage to trees.
4. Known as a saprophytic fungus.

M. Mycorrhizal.

Our assignment of an organism to a specific category is based on our field observations and laboratory experience. Decay fungi, which are certainly among the most serious fungi on forest trees, are difficult to place in this rating system as many do not kill their hosts but do cause significant wood volume loss. This loss cannot be considered an injury but may predispose the host to eventual breakage from wind, ice or other physical agents.

Geographic locations refer to the provincial administrative regions as presented in Figure 1. We have elected to use a suitable abbreviation in designating the regions, such as NE for the Northeastern Region. In the text, the number of collections from a region follows the abbreviation and is enclosed within parentheses. It should be noted that these are the regions from which the fungus was reported; the fungus was not necessarily more abundant there, nor was it necessarily absent from other regions.

Many of the fungi and the diseases they cause do not have common names. For these we have constructed a name using the fungal genus, the type of disease, or the host, whichever we deemed most appropriate and least confusing. We do not necessarily nominate these as official common names but use them only to facilitate the use of this host index.

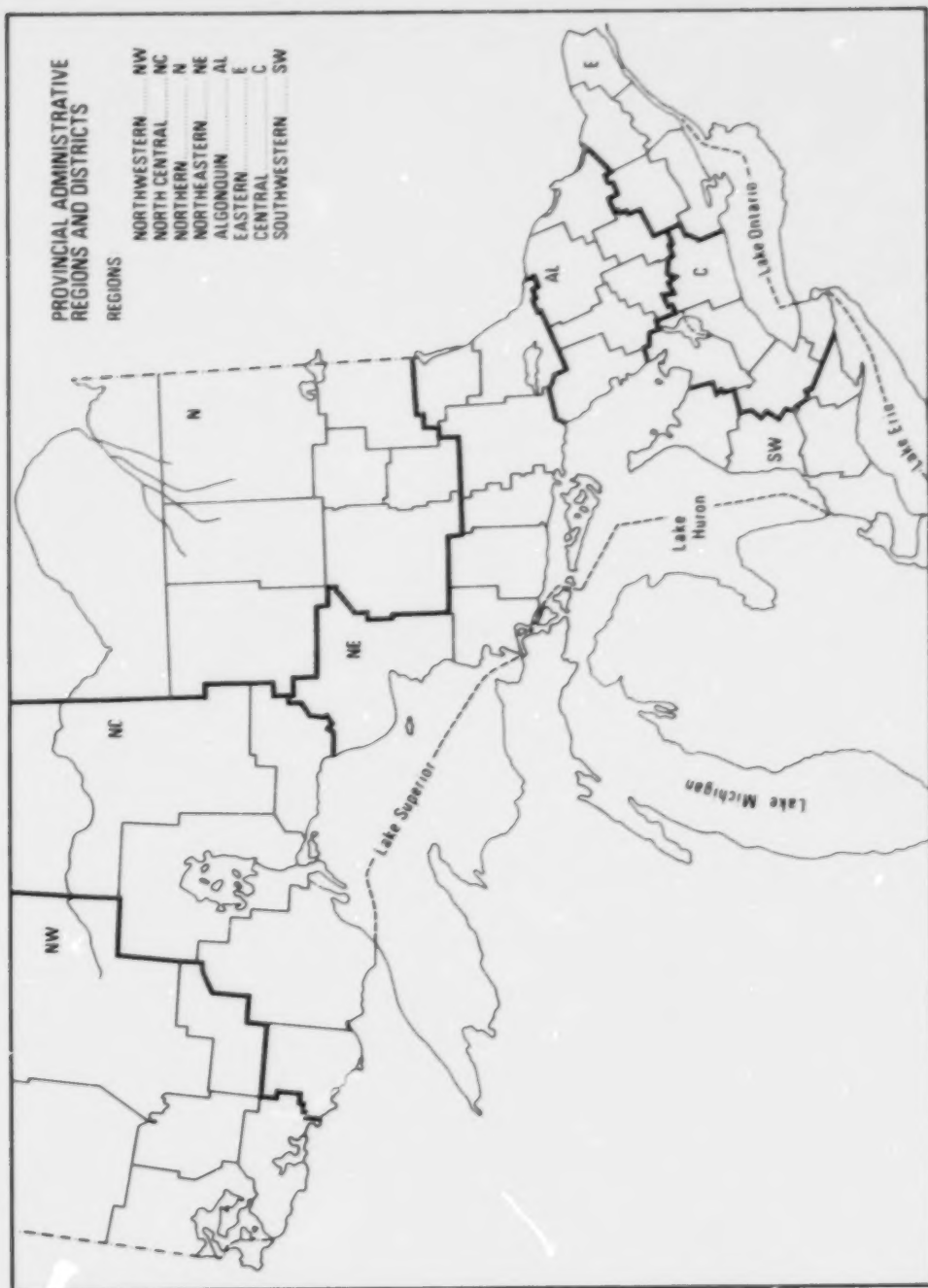


Figure 1. A map of the province of Ontario with the Ontario Ministry of Natural Resources provincial administrative regions bordered by darker lines and identified by the selected abbreviation.



**HOST/FUNGUS LISTING**



*Abies balsamea* (L.) Mill., balsam fir

*Aleurodiscus amorphus* (Pers.:Fr.) Schröter: white rot and canker of balsam fir

Disease Rating: 3

Loc.: N (1), NE (1), C (1)

*Amylostereum chailletii* (Pers.:Fr.) Boidin: wood wasp sterium

Syn.: *Stereum chailletii* (Pers.:Fr.) Fr.

Disease Rating: 2

Loc.: NW (1)

*Armillaria mellea* (Vahl:Fr.) Kummer<sup>1</sup>: armillaria root rot

Syn.: *Armillariella mellea* (Vahl:Fr.) P. Karsten

Disease Rating: 1

Loc.: NW (5), NC (15), N (12), NE (7), AL (9), C (3), SW (1)

*Ascolyxa abietis* Naumov: balsam twig blight

Syn.: *Godronia abietis* (Naumov) Seaver

Anamorph: *Bothrodiscus berenice* (Berk. & M.A. Curtis) J.W. Groves

Disease Rating: 3

Loc.: AL (1)

*Ascocoryne sarcoides* (Jacq.:Fr.) J.W. Groves & D. Wilson: pink stain

Syn.: *Coryne sarcoides* (Jacq.:Fr.) Tul.

Disease Rating: 3

Loc.: NC (1)

*Asterodon ferruginosus* Pat.: white rot

Disease Rating: 3

Loc.: N (1)

*Botryotinia fuckeliana* (de Bary) Whetzel: gray mold

Syn.: *Sclerotinia fuckeliana* (de Bary) Fuckel

Anamorph: *Botrytis cinerea* Pers.:Fr.

Disease Rating: 1

Loc.: SW (1)

*Celluloseporium* sp.: balsam cytosporium

Syn.: *Cytosporium* sp.

Disease Rating: 4

Loc.: NC (1), AL (1)

*Cephalosporium* sp.: cephalosporium wilt

Disease Rating: 4

Loc.: NW (1), NC (1), N (2), NE (3), E (1), C (1)

<sup>1</sup> Recent research has demonstrated that most collections in Ontario identified as *A. mellea* are in fact *A. ostioyae* (Romagn.) Herink.

*Abies balsamea* (L.) Mill., balsam fir

*Ceratocystis* sp.: blue stain

Disease Rating: 2

Loc.: N (1)

*Chaetomium* sp.: chaetomium

Disease Rating: 4

Loc.: NE (2)

*Chlorociboria aeruginascens* (Nyl.) Kanouse ex Ramam., Korf & Batra: blue-green stain

Anamorph: *Dothiorina tulasnei* (Sacc.) Höhnelt

Disease Rating: 4

Loc.: NC (1), N (1)

*Cladosporium* sp.: needle spot

Disease Rating: 3

Loc.: NE (1)

*Climacocystis borealis* (Fr.) Kotl. & Pouzar: white mottled rot

Syn.: *Polyporus borealis* Fr.

Syn.: *Tyromyces borealis* (Fr.) Imaz.

Disease Rating: 2

Loc.: NW (1)

*Coniophora puteana* (Schumacher:Fr.) P. Karsten: brown cubical rot

Disease Rating: 2

Loc.: NW (1), NC (1), N (2), NE (3), AL (4), C (1)

*Coniothyrium* sp.: conifer coniothyrium

Disease Rating: 3

Loc.: NW (1), N (1), NE (1)

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: N (2), NE (2), AL (2), E (2), C (1), SW (1)

*Cytospora* sp.: shoot blight

Disease Rating: 3

Loc.: AL (1)

*Delphinella balsameae* (Waterman) E. Müller: tip blight

Syn.: *Rehmiellopsis balsameae* Waterman

Disease Rating: 3

Loc.: NC (2)

*Dermea balsamea* (Peck) Seaver: dermea twig canker

Anamorph: *Foveostroma abietinum* (Peck) Di Cosmo

Syn.: *Gelatinosporium abietinum* Peck

Disease Rating: 3

Loc.: NW (1), NC (2), N (3), NE (2), AL (2), C (1), SW (1)

*Abies balsamea* (L.) Mill., balsam fir

*Dichomitus squalens* (P. Karsten) Reid: red ray rot

Syn.: *Polyporus anceps* Peck

Disease Rating: 2

Loc.: NW (1)

*Diplodia* sp.: diplodia canker

Disease Rating: 2

Loc.: NW (1), NC (1)

*Fomitopsis pinicola* (Swartz:Fr.) P. Karsten: brown crumbly rot

Syn.: *Fomes pinicola* (Swartz:Fr.) Cooke

Syn.: *Polyporus pinicola* Swartz:Fr.

Disease Rating: 2

Loc.: NW (1), NC (1), N (1)

*Fumago* sp.: sooty mold

Disease Rating: 4

Loc.: NC (1)

*Gelatinosporium* sp.: stem canker

Syn.: *Micropera* sp.

Disease Rating: 3

Loc.: N (1), AL (3), SW (1)

*Gliocladium roseum* (Link) Bainier: gliocladium stain

Disease Rating: 4

Loc.: NW (1)

*Gloeophyllum protractum* (Fr.) Imaz.: brown cubical rot

Syn.: *Trametes protracta* Fr.

Disease Rating: 4

Loc.: NW (1), NE (1), E (1)

*Gloeosporium* sp.: branch canker

Disease Rating: 4

Loc.: NE (1)

*Haematostereum sanguinolentum* (Alb. & Schwein:Fr.) Pouzar: red heart rot

Syn.: *Stereum sanguinolentum* (Alb. & Schwein:Fr.) Fr.

Disease Rating: 2

Loc.: NW (1), NC (3), N (2), NE (3)

*Hendersonia* sp.: needle blight

Disease Rating: 3

Loc.: NE (1)

*Hormiscium* sp.: hormiscium

Disease Rating: 4

Loc.: NE (2)

*Abies balsamea* (L.) Mill., balsam fir

*Hormodendrum* sp.: wood stain

Disease Rating: 4

Loc.: NW (1), NE (2), AL (1)

*Hypodermella* sp.: needle cast

Disease Rating: 3

Loc.: NW (1), N (1), NE (1)

*Inonotus tomentosus* (Fr.) Teng: tomentosus root rot

Syn.: *Polyporus tomentosus* Fr.

Disease Rating: 1

Loc.: NW (1), NC (1), NE (3)

*Isthmiella* sp.: isthmiella needle cast

Syn.: *Bifusella* sp.

Disease Rating: 3

Loc.: NW (2), NC (2)

*Isthmiella faullii* (Darker) Darker: isthmiella needle cast

Syn.: *Bifusella faullii* Darker

Disease Rating: 3

Loc.: NW (12), NC (6), N (3), NE (4), AL (1)

*Lachnellula agassizii* (Berk. & M.A. Curtis) Dennis: lachnellula dieback

Syn.: *Dasyscyphus agassizii* (Berk. & M.A. Curtis) Sacc.

Syn.: *Lachnella agassizii* (Berk. & M.A. Curtis) Seaver

Disease Rating: 3

Loc.: NC (1), N (1), SW (1)

*Leptosphaeria faullii* Darker: needle cast attacker<sup>2</sup>

Anamorph: *Coniothyrium faullii* Darker

Disease Rating: 4

Loc.: NW (1), NC (1)

*Leucostoma kunzei* (Fr.) Munk: cytospora canker

Syn.: *Valsa kunzei* Fr.

Anamorph: *Cytospora kunzei* Sacc.

Disease Rating: 2

Loc.: AL (1), C (1)

*Lirula mirabilis* (Darker) Darker: lirula needle cast of balsam

Syn.: *Hypodermella mirabilis* Darker

Disease Rating: 3

Loc.: NW (3), NC (10), N (3)

*Lirula nervata* (Darker) Darker: lirula needle cast of balsam

Syn.: *Hypodermella nervata* Darker

Disease Rating: 3

Loc.: NC (7), N (4), NE (1), AL (2)

<sup>2</sup> This fungus colonizes ascomata of needle cast fungi, on which it is assumed to be parasitic.

*Abies balsamea* (L.) Mill., balsam fir

*Lophodermium* sp.: needle cast

Disease Rating: 3

Loc.: NW (1), NC (2), N (1)

*Lophodermium lacerum* Darker: balsam needle cast

Disease Rating: 3

Loc.: NE (1)

*Macrophoma* sp.: needle blight

Disease Rating: 3

Loc.: NC (1)

*Melampsora* sp.: needle rust

Disease Rating: 3

Loc.: NC (2)

*Melampsora abieti-capraearum* Tubeuf: fir willow rust

Disease Rating: 3

Loc.: N (1), E (3)

*Melampsorella caryophyllacearum* Schröter: fir broom rust

Syn.: *Melampsorella cerastii* (Pers.) Schröter

Disease Rating: 3

Loc.: NW (25), NC (15), N (25), NE (5), AL (1), E (3)

*Menispora* sp.: dead bark menispora

Disease Rating: 4

Loc.: NC (1)

*Nectria* sp.: nectria canker

Disease Rating: 2

Loc.: NE (1)

*Nidularia* sp.: bird's nest fungus

Disease Rating: 4

Loc.: N (1)

*Nothophacidium abietinellum* (Dearn.) J. Reid & Cain: snow blight

Syn.: *Phacidium abietinellum* Dearn.

Disease Rating: 1

Loc.: NC (3)

*Pestalotia* sp.: needle and shoot blight

Disease Rating: 4

Loc.: NE (1)

*Phacidium* sp.: snow blight

Disease Rating: 1

Loc.: NC (1), NE (1)

*Abies balsamea* (L.) Mill., balsam fir

*Phacidium abietis* (Dearn.) J. Reid & Cain: snow blight

Syn.: *Phacidium infestans* P. Karsten var. *abietis* Dearn.

Disease Rating: 1

Loc.: NW (3), NC (8), N (9), NE (5)

*Phaeolus schweinitzii* (Fr.) Pat.: brown cubical rot

Syn.: *Polyporus schweinitzii* Fr.

Disease Rating: 1

Loc.: N (1), C (1)

*Phellinus pini* (Brot.:Fr.) A. Ames: red ring rot

Syn.: *Fomes pini* (Brot.:Fr.) P. Karsten

Disease Rating: 1

Loc.: N (1)

*Phlebiopsis gigantea* (Fr.) Jül.: peniophora gigantea

Syn.: *Peniophora gigantea* (Fr.) Massee

Disease Rating: 4

Loc.: N (1)

*Phoma* sp.: needle blight

Disease Rating: 3

Loc.: NW (1), NE (1)

*Phyllosticta* sp.: shoot blight

Syn.: *Phyllostictina* sp.

Disease Rating: 3

Loc.: NW (4), AL (1), C (1)

*Pucciniastrum* sp.: needle rust

Disease Rating: 2

Loc.: NW (5), NC (7), N (3), SW (1)

*Pucciniastrum epilobii* Otth: fir-fireweed rust

Disease Rating: 3

Loc.: NW (44), NC (32), N (46), NE (5), AL (5), SW (3)

*Pucciniastrum goeppertianum* (Kühn) Kleb.: fir-witch's broom rust of blueberry

Disease Rating: 3

Loc.: NC (5), AL (1)

*Resinicium bicolor* (Alb. & Schwein.:Fr.) Parm.: white stringy rot

Syn.: *Odontia bicolor* (Alb. & Schwein.:Fr.) Quélet

Disease Rating: 3

Loc.: NE (2), AL (1), SW (1)

*Rhinocladiella* sp.: chip pile fungus

Disease Rating: 4

Loc.: NW (1)

*Abies balsamea* (L.) Mill., balsam fir

*Rhizocalyx abietis* Petrak: needle blight

Anamorph: *Rhizothyrium abietis* Naumov

Disease Rating: 3

Loc.: N (1), NE (1)

*Rhizosphaera pini* (Corda) Maubl.: needle blight

Syn.: *Coniothyrium pini* Corda

Disease Rating: 2

Loc.: NW (1), NC (8), N (14), NE (4), AL (1), C (1)

*Sarcotrichia balsameae* (J. Davis) Korf: snow blight

Syn.: *Phacidium balsameae* J. Davis

Anamorph: *Kabatella balsameae* (J. Davis) v. Arx

Disease Rating: 1

Loc.: NC (7), N (3)

*Scolecotectria cucurbitula* (Tode:Fr.) C. Booth: canker and dieback

Syn.: *Ophionectria cylindrospora* (Sollman) Berl. & Vogl.

Anamorph: *Zythiostroma pinastri* (P. Karsten) Höhnelt

Disease Rating: 2

Loc.: N (2), E (1), C (1), NC (1)

*Scytinostroma galactinum* (Fr.) Donk: yellow stringy rot

Syn.: *Corticium galactinum* (Fr.) Burt

Disease Rating: 2

Loc.: NC (2), E (1)

*Skeletocutis nivea* (Junghuhn) Keller: straw-colored decay fungus

Syn.: *Polyporus niveus* Junghuhn

Syn.: *Polyporus semipileatus* Peck

Disease Rating: 4

Loc.: N (1), AL (1)

*Stemphylium* sp.: dead bark colonizer

Disease Rating: 4

Loc.: NE (1)

*Sydowia polyspora* (Bref. & Tav.) E. Müller: needle blight

Anamorph: *Sclerophoma pythiophila* (Corda) Höhnelt

Disease Rating: 3

Loc.: NE (1)

*Thyronectria balsamea* (Cooke & Peck) Seeler: balsam fir canker

Disease Rating: 2

Loc.: NC (1), N (6), NE (1), AL (2)

*Tryblidiopsis pinastri* (Pers.:Fr.) P. Karsten: branch canker

Anamorph: *Tryblidiopycnis pinastri* Höhnelt

Disease Rating: 3

Loc.: NC (1)

*Abies balsamea* (L.) Mill., balsam fir

*Tympanis truncatula* (Pers.:Fr.) Rehm: tympanis dieback

Syn.: *Tympanis pinastri* Tul.

Disease Rating: 3

Loc.: NE (1)

*Uredinopsis* sp.: balsam fir-fern rust

Disease Rating: 3

Loc.: NC (1), N (2), NE (2), E (2), SW (1)

*Valsa* sp.: cytospora canker

Disease Rating: 3

Loc.: AL (1)

*Valsa abietis* Fr.: cytospora canker

Anamorph: *Cytospora abietis* Sacc.

Disease Rating: 3

Loc.: NW (1), NC (1), N (2), SW (1), AL (2)

*Valsa friesii* (Duby) Fuckel: needle blight

Anamorph: *Cytospora friesii* Sacc.

Syn.: *Cytospora dubyi* Sacc.

Syn.: *Cytospora pinastri* Fr.

Disease Rating: 3

Loc.: NW (4), NC (2), N (4), NE (2), AL (1), E (3), C (1)

*Valsa pini* Alb. & Schwein:Fr.: cytospora canker

Disease Rating: 3

Loc.: AL (1)

*Verticillium* sp.: seedling root rot

Disease Rating: 2

Loc.: NW (1), N (1), NE (4), AL (2), SW (1)

*Abies lasiocarpa* (Hook.) Nutt., alpine fir

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: NW (1)

*Juniperus* spp., juniper

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: NE (1)

*Gymnosporangium* sp.: juniper rust

Disease Rating: 3

Loc.: SW (1)

*Gymnosporangium clavipes* (Cooke & Peck) Cooke & Peck: quince rust

Disease Rating: 2

Loc.: NE (1), SW (3)

*Gymnosporangium globosum* Farlow: globose gall rust

Syn.: *Roestelia lacerata* Tul.

Disease Rating: 3

Loc.: C (6)

*Gymnosporangium juniperi-virginianae* Schwein.: cedar-apple rust

Disease Rating: 2

Loc.: SW (1)

*Gymnosporangium nelsonii* Arthur: Nelson's juniper rust

Syn.: *Gymnosporangium corniculans* Kern

Disease Rating: 3

Loc.: SW (1)

*Kabatina thujae* A. Schneider & v. Arx var. *juniperi* (A. Schneider & v. Arx)

Morelet: kabatina needle blight

Disease Rating: 1

Loc.: NE (1), C (1)

*Lophodermium juniperinum* (Fr.) de Not.: juniper needle cast

Syn.: *Lophodermium juniperi* (Grev.) Darker

Disease Rating: 3

Loc.: AL (2), E (1), C (2)

*Pestalotia* sp.: needle and shoot blight

Disease Rating: 4

Loc.: C (1)

*Phoma* sp.: needle blight

Disease Rating: 3

Loc.: C (1)

***Juniperus communis* L., common juniper**

*Gymnosporangium clavipes* (Cooke & Peck) Cooke & Peck: quince rust

Disease Rating: 2

Loc.: NE (1), SW (1)

*Stigmina juniperina* (Georgescu & Badea) M.B. Ellis: juniper blight

Syn.: *Cercospora juniperina* Georgescu & Badea

Disease Rating: 2

Loc.: AL (1), SW (1)

***Juniperus communis* var. *depressa* Pursh, ground juniper**

*Gymnosporangium clavariiforme* (Pers.) DC.: clavariform juniper rust

Disease Rating: 2

Loc.: NW (1)

*Gymnosporangium clavipes* (Cooke & Peck) Cooke & Peck: quince rust

Disease Rating: 2

Loc.: E (1)

*Lophodermium juniperinum* (Fr.) de Not.: juniper needle cast

Syn.: *Lophodermium juniperi* (Grev.) Darker

Disease Rating: 3

Loc.: AL (2), C (1)

*Phoma* sp.: needle blight

Disease Rating: 3

Loc.: NW (1)

***Juniperus horizontalis* Moench, creeping juniper**

*Gymnosporangium clavipes* (Cooke & Peck) Cooke & Peck: quince rust

Disease Rating: 2

Loc.: NC (1)

*Lophodermium juniperinum* (Fr.) de Not.: juniper needle cast

Syn.: *Lophodermium juniperi* (Grev.) Darker

Disease Rating: 3

Loc.: E (1)

*Phomopsis juniperovora* Hahn: phomopsis blight

Disease Rating: 2

Loc.: SW (1)

*Juniperus virginiana* L., eastern red cedar

*Aplosporella* sp.: needle blight

Alternate Spelling: *Haplosporella* sp.

Disease Rating: 4

Loc.: E (1)

*Coniothyrium* sp.: conifer coniothyrium

Disease Rating: 3

Loc.: E (1)

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: E (7), SW (1)

*Didymascella thujina* (E. Durand) Maire: keithia needle blight

Syn.: *Keithia thujina* E. Durand

Disease Rating: 2

Loc.: E (1)

*Diplodia* sp.: diplodia canker

Disease Rating: 2

Loc.: E (1)

*Fusicoccum* sp.: needle blight

Disease Rating: 3

Loc.: AL (1)

*Gelatinosporium* sp.: stem canker

Syn.: *Micropera* sp.

Disease Rating: 3

Loc.: E (1)

*Gymnosporangium* sp.: juniper rust

Disease Rating: 3

Loc.: E (1)

*Gymnosporangium clavipes* (Cooke & Peck) Cooke & Peck: quince rust

Disease Rating: 2

Loc.: E (5), SW (4)

*Gymnosporangium globosum* Farlow: globose gall rust

Syn.: *Roestelia lacerata* Tul.

Disease Rating: 3

Loc.: E (4), C (3), SW (5)

*Gymnosporangium juniperi-virginianae* Schwein.: cedar-apple rust

Disease Rating: 2

Loc.: E (11), SW (7)

*Hainesia* sp.: dead bark colonizer

Disease Rating: 4

Loc.: AL (1)

*Juniperus virginiana* L., eastern red cedar

*Hendersonia* sp.: needle blight

Disease Rating: 3

Loc.: E (1)

*Heterobasidium annosum* (Fr.) Bref.: fomes root rot

Syn.: *Fomes annosus* (Fr.) P. Karsten

Anamorph: *Spiniger meineckellus* (A. Olson) Stalpers

Disease Rating: 1

Loc.: SW (1)

*Hormodendrum* sp.: wood stain

Disease Rating: 4

Loc.: E (3), C (1)

*Kabatina thujae* A. Schneider & v. Arx var. *juniperi* (A. Schneider & v. Arx)

Morelet: kabatina needle blight

Disease Rating: 1

Loc.: NE (1), E (2), C (1), AL (2)

*Libertella* sp.: juniper libertella

Disease Rating: 3

Loc.: E (1)

*Lophodermium juniperinum* (Fr.) de Not.: juniper needle cast

Syn.: *Lophodermium juniperi* (Grev.) Darker

Disease Rating: 3

Loc.: AL (1), E (2), C (1)

*Pestalotia* sp.: needle and shoot blight

Disease Rating: 4

Loc.: SW (1)

*Phoma* sp.: needle blight

Disease Rating: 3

Loc.: AL (1), E (1)

*Phomopsis* sp.: phomopsis canker

Disease Rating: 3

Loc.: E (3)

*Phomopsis juniperovora* Hahn: phomopsis blight

Disease Rating: 2

Loc.: E (1)

*Sydowia polyspora* (Bref. & Tav.) E. Müller: needle blight

Anamorph: *Sclerophoma pithiophila* (Corda) Höhnelt

Disease Rating: 3

Loc.: E (2), C (1)

*Valsa* sp.: cytospora canker

Disease Rating: 3

Loc.: E (1)

*Larix* spp., larch

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: E (1)

*Hormiscium* sp.: hormiscium

Disease Rating: 4

Loc.: N (1)

*Hormodendrum* sp.: wood stain

Disease Rating: 4

Loc.: SW (1)

*Hypodermella laricis* Tubeuf: larch needle cast

Disease Rating: 3

Loc.: NW (2), C (1), SW (1)

*Melampsora* sp.: needle rust

Disease Rating: 3

Loc.: NC (1), E (1)

*Melampsora paradoxa* Dietel & Holway: larch-willow rust

Syn.: *Melampsora bigelowii* Thüm.

Disease Rating: 3

Loc.: NE (1)

*Phoma* sp.: needle blight

Disease Rating: 3

Loc.: SW (1)

*Phomopsis* sp.: phomopsis canker

Disease Rating: 3

Loc.: SW (1)

*Valsa abietis* Fr.: cytospora canker

Anamorph: *Cytospora abietis* Sacc.

Disease Rating: 3

Loc.: NC (1), AL (1)



*Larix decidua* Mill., European larch

*Armillaria mellea* (Vahl:Fr.) Kummer<sup>3</sup>: armillaria root rot

Syn.: *Armillariella mellea* (Vahl:Fr.) P. Karsten

Disease Rating: 1

Loc.: NW (1)

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: C (2), SW (2)

*Epicoccum purpurascens* Ehrenb. ex Schlecht.: epicoccum

Syn.: *Epicoccum nigrum* Link

Disease Rating: 4

Loc.: SW (1)

*Fomitopsis pinicola* (Swartz:Fr.) P. Karsten: brown crumbly rot

Syn.: *Fomes pinicola* (Swartz:Fr.) Cooke

Syn.: *Polyporus pinicola* Swartz:Fr.

Disease Rating: 2

Loc.: AL (1)

*Leucostoma kunzei* (Fr.) Munk: cytospora canker

Syn.: *Valsa kunzei* Fr.

Anamorph: *Cytospora kunzei* Sacc.

Disease Rating: 2

Loc.: C (1)

*Melampsora* sp.: needle rust

Disease Rating: 3

Loc.: C (1)

*Meria laricis* Vuill.: larch needle cast

Disease Rating: 2

Loc.: E (1), C (2), SW (8)

*Phellinus pini* (Brot.:Fr.) A. Ames: red ring rot

Syn.: *Fomes pini* (Brot.:Fr.) P. Karsten

Disease Rating: 1

Loc.: C (1)

*Scolecnectria cucurbitula* (Tode:Fr.) C. Booth: orange canker fungus

Syn.: *Ophionectria cylindrospora* (Sollman) Berl. & Vogl.

Anamorph: *Zythiostroma pinastri* (P. Karsten) Höhnelt

Disease Rating: 2

Loc.: C (1)

<sup>3</sup> Recent research has indicated that most collections in Ontario identified as *A. mellea* are in fact *A. ostoyae* (Romagn.) Herink.

***Larix decidua* Mill., European larch**

*Sphaeropsis* sp.: diplodia canker

Disease Rating: 2

Loc.: SW (1)

*Valsa abietis* Fr.: cytospora canker

Anamorph: *Cytospora abietis* Sacc.

Disease Rating: 3

Loc.: C (1)

*Larix laricina* (Du Roi) K. Koch, tamarack

*Armillaria mellea* (Vahl:Fr.) Kummer<sup>4</sup>: armillaria root rot

Syn.: *Armillariella mellea* (Vahl:Fr.) P. Karsten

Disease Rating: 1

Loc.: NC (1), AL (1)

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: NC (2), N (2), E (1), SW (1)

*Fusicoccum* sp.: needle blight

Disease Rating: 3

Loc.: SW (1)

*Lachnellula* sp.: lachnellula dieback

Disease Rating: 2

Loc.: N (1), NE (1)

*Lachnellula occidentalis* (Hahn & Ayers) Dharne: lachnellula dieback

Syn.: *Dasyscyphus occidentalis* Hahn & Ayers

Syn.: *Lachnella hahniana* (Seaver) Dennis

Syn.: *Lachnella occidentalis* (Hahn & Ayers) Seaver

Disease Rating: 3

Loc.: N (1)

*Melampsora* sp.: needle rust

Disease Rating: 3

Loc.: NW (2), NC (3), N (17), NE (2), AL (3), E (2)

*Melampsora medusae* Thüm.: conifer-aspen rust

Disease Rating: 3

Loc.: NE (1), AL (4), E (1), C (2), SW (1)

*Melampsora paradoxa* Dietel & Holway: larch-willow rust

Syn.: *Melampsora bigelowii* Thüm.

Disease Rating: 3

Loc.: N (1), NE (7), AL (1)

*Meria laricis* Vuill.: larch needle cast

Disease Rating: 2

Loc.: E (1)

*Mytilidion* sp.: clam shell fungus

Disease Rating: 4

Loc.: E (1)

<sup>4</sup> Recent research has demonstrated that most collections in Ontario identified as *A. mellea* are in fact *A. ostoyae* (Romagn.) Herink.

*Larix laricina* (Du Roi) K. Koch, tamarack

*Nectria* sp.: nectria canker

Disease Rating: 2

Loc.: NC (1)

*Phacidium* sp.: snow blight

Disease Rating: 1

Loc.: SW (1)

*Phellinus pini* (Brot.:Fr.) A. Ames: red ring rot

Syn.: *Fomes pini* (Brot.:Fr.) P. Karsten

Disease Rating: 1

Loc.: E (1)

*Phomopsis* sp.: phomopsis canker

Disease Rating: 3

Loc.: NW (1)

*Valsa abietis* Fr.: cytospora canker

Anamorph: *Cytospora abietis* Sacc.

Disease Rating: 3

Loc.: SW (1), AL (1)

*Picea spp., spruce*

*Chrysomyxa ledi* (Alb. & Schwein.) de Bary: spruce needle rust<sup>5</sup>

Disease Rating: 2

Loc.: NC (1), N (3)

*Leucostoma kunzei* (Fr.) Munk: cytospora canker

Syn.: *Valsa kunzei* Fr.

Anamorph: *Cytospora kunzei* Sacc.

Disease Rating: 2

Loc.: NC (1)

*Lophodermium piceae* (Fuckel) Höhnelt: spruce needle cast

Disease Rating: 3

Loc.: NC (1)

*Rhizosphaera kalkhoffii* Bubák: needle blight

Disease Rating: 2

Loc.: SW (1)

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<sup>5</sup> No variety had been determined for any of the collections listed.



*Picea abies* (L.) Karst., Norway spruce

*Coniothyrium* sp.: conifer coniothyrium

Disease Rating: 3

Loc.: SW (1)

*Dinemasporium* sp.: dendrophoma

Disease Rating: 4

Loc.: SW (1)

*Gloeophyllum trabeum* (Pers.:Fr.) Murrill: brown cubical rot

Syn.: *Daedalea trabea* Fr.

Syn.: *Lenzites trabea* Pers.:Fr.

Disease Rating: 4

Loc.: SW (1)

*Inonotus tomentosus* (Fr.) Teng: tomentosus root rot

Syn.: *Polyporus tomentosus* Fr.

Disease Rating: 1

Loc.: SW (1)

*Leucostoma kunzei* (Fr.) Munk: cytospora canker

Syn.: *Valsa kunzei* Fr.

Anamorph: *Cytospora kunzei* Sacc.

Disease Rating: 2

Loc.: AL (1), E (2), C (2), SW (1)

*Phaeolus schweinitzii* (Fr.) Pat.: brown cubical rot

Syn.: *Polyporus schweinitzii* Fr.

Disease Rating: 1

Loc.: E (1)

*Rhizosphaera kalkhoffii* Bubák: needle blight

Disease Rating: 2

Loc.: C (1)

*Schizophyllum commune* Vaill.:Fr.: common split gill

Disease Rating: 4

Loc.: C (1)



*Picea glauca* (Moench) Voss, white spruce

*Antrodia variiformis* (Peck) Donk: brown trunk rot

Syn.: *Coriolellus variiformis* (Peck) Sarkar

Syn.: *Polyporus variiformis* Peck

Syn.: *Trametes variiformis* Peck

Disease Rating: 3

Loc.: NE (1)

*Arceuthobium pusillum* Peck<sup>6</sup>: eastern dwarf mistletoe

Disease Rating: 1

Loc.: NW (1), N (1), NE (1), E (3), SW (8)

*Armillaria mellea* (Vahl:Fr.) Kummer<sup>7</sup>: armillaria root rot

Syn.: *Armiliariella mellea* (Vahl:Fr.) P. Karsten

Disease Rating: 1

Loc.: NW (6), NC (19), N (13), NE (3), AL (3), C (3), SW (1)

*Ascocalyx abietina* (Lagerb.) Schläpfer-Bernhard: scleroderris canker

Syn.: *Gremmeniella abietina* (Lagerb.) Morelet

Syn.: *Scleroderris lagerbergii* Gremmen

Anamorph: *Brunchorstia pinea* (P. Karsten) Höhnelt

Disease Rating: 1

Loc.: N (1)

*Ascocoryne sarcoides* (Jacq.:Fr.) J.W. Groves & D. Wilson: pink stain

Syn.: *Coryne sarcoides* (Jacq.:Fr.) Tul.

Disease Rating: 3

Loc.: NW (1), NC (4), NE (5), AL (1), C (1)

*Biatorella resinae* (Fr.) Mudd: resin cup fungus

Syn.: *Tromera resinae* (Fr.) Körber

Anamorph: *Zythia resinae* (Ehrenb.:Fr.) P. Karsten

Syn.: *Pycnidiella resinae* (Ehrenb.:Fr.) Höhnelt

Disease Rating: 4

Loc.: N (1), AL (1), E (1), SW (1)

*Bjerkandera adusta* (Willd.:Fr.) P. Karsten: scorched conk fungus

Syn.: *Polyporus adustus* Willd.:Fr.

Disease Rating: 4

Loc.: NC (1)

*Botryotinia fuckeliana* (de Bary) Whetzel: gray mold

Syn.: *Sclerotinia fuckeliana* (de Bary) Fuckel

Anamorph: *Botrytis cinerea* Pers.:Fr.

Disease Rating: 1

Loc.: N (1)

<sup>6</sup> *A. pusillum* is a parasitic phanerogam, not a fungus.

<sup>7</sup> Recent research has demonstrated that most collections in Ontario identified as *A. mellea* are in fact *A. ostoyae* (Romagn.) Herink.

*Picea glauca* (Moench) Voss, white spruce

*Cenangium acuum* Cooke & Peck: twig blight

Disease Rating: 4

Loc.: NE (1)

*Cephalosporium* sp.: cephalosporium wilt

Disease Rating: 4

Loc.: NE (2)

*Chaetomium globosum* Kunze:Fr.: olive-green mold

Disease Rating: 4

Loc.: NE (1)

*Chloridium* sp.: green stain

Disease Rating: 4

Loc.: NC (1)

*Chlorociboria* sp.: blue-green stain

Disease Rating: 4

Loc.: NC (1)

*Chlorociboria aeruginascens* (Nyl.) Kanouse ex Ramam., Korf & Batra: blue-green stain

Anamorph: *Dothiorina tulasnei* (Sacc.) Höhnelt

Disease Rating: 4

Loc.: NE (2)

*Chrysomyxa arctostaphyli* Dietel: spruce broom rust

Disease Rating: 2

Loc.: NW (2), NC (5), NE (4)

*Chrysomyxa ledi* (Alb. & Schwein.) de Bary: spruce needle rust<sup>8</sup>

Disease Rating: 2

Loc.: NW (25), NC (17), N (23), NE (13), AL (5), E (2), C (2)

*Chrysomyxa ledi* (Alb. & Schwein.) de Bary var *ledi*: small-spored spruce-Labrador tea rust

Syn.: *Chrysomyxa ledi* (Alb. & Schwein.) de Bary var. *groenlandici* Savile

Disease Rating: 2

Loc.: NW (3), N (10), NE (1)

*Chrysomyxa ledicola* (Peck) Lagerh.: large-spored spruce-Labrador tea rust

Disease Rating: 2

Loc.: NW (19), NC (29), N (40), NE (24), AL (1)

*Chrysomyxa pirolata* (Körn.) Winter: spruce cone rust

Syn.: *Chrysomyxa pyrolae* (DC.) Rostrup

Disease Rating: 2

Loc.: NW (3), NC (20), N (6), NE (7), AL (7), E (2), C (3)

*Chrysomyxa weirii* H. Jackson: Weir's spruce-cushion rust

Disease Rating: 2

Loc.: E (2)

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<sup>8</sup> No variety had been determined for any of the collections listed.

*Picea glauca* (Moench) Voss, white spruce

*Cladosporium* sp.: needle spot

Disease Rating: 3

Loc.: NW (1), NE (2)

*Climacocystis borealis* (Fr.) Kotl. & Pouzar: white mottled rot

Syn.: *Polyporus borealis* Fr.

Syn.: *Tyromyces borealis* (Fr.) Imaz.

Disease Rating: 2

Loc.: NE (1)

*Coniophora puteana* (Schumacher:Fr.) P. Karsten: brown cubical rot

Disease Rating: 2

Loc.: NE (3), AL (1)

*Coniothyrium* sp.: conifer coniothyrium

Disease Rating: 3

Loc.: E (1)

*Conocybe tenera* (Schäffer:Fr.) Fayod: brown dunce cap

Disease Rating: 4

Loc.: NE (1)

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: NE (3), E (1), C (1), SW (3)

*Dermea* sp.: dermea canker

Disease Rating: 3

Loc.: NE (1)

*Dichomitus squalens* (P. Karsten) Reid: red ray rot

Syn.: *Polyporus anceps* Peck

Disease Rating: 2

Loc.: N (1), C (1)

*Dinemasporium* sp.: dendrophoma

Disease Rating: 4

Loc.: C (1), SW (1)

*Epicoccum* sp.: epicoccum

Disease Rating: 4

Loc.: NE (1)

*Fomitopsis cajanderi* (P. Karsten) Kotl. & Pouzar: pink-colored conk

Syn.: *Fomes cajanderi* P. Karsten

Syn.: *Fomes subroseus* (Weir) Overh.

Syn.: *Trametes subrosea* Weir

Disease Rating: 3

Loc.: AL (1), E (1)

***Picea glauca* (Moench) Voss, white spruce**

*Fomitopsis pinicola* (Swartz:Fr.) P. Karsten: brown crumbly rot

Syn.: *Fomes pinicola* (Swartz:Fr.) Cooke

Syn.: *Polyporus pinicola* Swartz:Fr.

Disease Rating: 2

Loc.: NC (1), N (3), NE (2), AL (1), E (1), SW (1)

*Ganoderma applanatum* (Pers.) Pat.: artist's conk

Syn.: *Fomes applanatus* (Pers.:Wallr.) C. Gillet

Syn.: *Polyporus applanatus* (Pers.) Wallr.

Disease Rating: 3

Loc.: NW (1)

*Gliocladium* sp.: gliocladium stain

Disease Rating: 4

Loc.: N (1)

*Gliocladium roseum* (Link) Bainier: gliocladium stain

Disease Rating: 4

Loc.: NW (1), NC (3), N (1), NE (4)

*Gloeophyllum saepiarium* (Wulfen:Fr.) P. Karsten: brown cubical rot

Syn.: *Daedalea saepiaria* Wulfen:Fr.

Syn.: *Lenzites saepiaria* (Wulfen:Fr.) Fr.

Disease Rating: 4

Loc.: N (4)

*Haematostereum sanguinolentum* (Alb. & Schwein.:Fr.) Pouzar: red heart rot

Syn.: *Stereum sanguinolentum* (Alb. & Schwein.:Fr.) Fr.

Disease Rating: 2

Loc.: NW (1), NE (1), AL (1), E (1)

*Heterobasidion annosum* (Fr.) Bref.: fomes root rot

Syn.: *Fomes annosus* (Fr.) P. Karsten

Anamorph: *Spiniger meineckellus* (A. Olson) Stalpers

Disease Rating: 1

Loc.: SW (2)

*Hormiscium* sp.: hormiscium

Disease Rating: 4

Loc.: NE (1)

*Hormodendrum* sp.: wood stain

Disease Rating: 4

Loc.: N (2), NE (2), AL (1), SW (1)

*Hydnellum* sp.: hydnellum

Disease Rating: 4

Loc.: N (1)

*Picea glauca* (Moench) Voss, white spruce

*Inonotus circinatus* (Fr.) Gilbertson: circinatus root rot

Syn.: *Polyporus circinatus* Fr.

Disease Rating: 1

Loc.: C (1)

*Inonotus tomentosus* (Fr.) Teng: tomentosus root rot

Syn.: *Polyporus tomentosus* Fr.

Disease Rating: 1

Loc.: NW (1), NC (5), N (1), NE (8), AL (7), E (2), C (2), SW (2)

*Isthmiella crepidiformis* (Darker) Darker: isthmiella needle cast

Syn.: *Bifusella crepidiformis* Darker

Disease Rating: 3

Loc.: NW (1), NC (1), N (1), C (1)

*Leptosphaeria* sp.: leptosphaeria needle saprophyte

Disease Rating: 4

Loc.: NC (1)

*Leucostoma kunzei* (Fr.) Munk: cytospora canker

Syn.: *Valsa kunzei* Fr.

Anamorph: *Cytospora kunzei* Sacc.

Disease Rating: 2

Loc.: NE (1), AL (3), E (7), C (10), SW (4)

*Lirula macrospora* (Hartig) Darker: lirula needle cast of spruce

Syn.: *Lophodermium filiforme* Darker

Syn.: *Lophodermium macrosporum* (Hartig) Rehm

Anamorph: *Hypodermina hartigii* Hilitzer

Disease Rating: 3

Loc.: NW (1), AL (1), C (1), SW (1)

*Lophium* sp.: mussel shell fungus

Disease Rating: 4

Loc.: C (1)

*Lophium mytilinum* (Pers.) Fr.: mussel shell fungus

Disease Rating: 4

Loc.: N (1)

*Lophodermium piceae* (Fuckel) Höhnelt: spruce needle cast

Disease Rating: 3

Loc.: NC (1), N (1), NE (1), AL (1), E (1)

*Lophomerium darkeri* Ouellette: needle cast competitor

Disease Rating: 4

Loc.: NC (1)

*Picea glauca* (Moench) Voss, white spruce

*Lophophacidium hyperboreum* Lagerb.: snow blight

Disease Rating: 1

Loc.: AL (1)

*Melanconium* sp.: branch canker

Disease Rating: 4

Loc.: C (1)

*Menispora* sp.: dead bark menispora

Disease Rating: 4

Loc.: AL (1)

*Micraspis acicola* Darker: needle blight

Anamorph: *Periperidium acicola* Darker

Disease Rating: 2

Loc.: N (1)

*Nectria* sp.: nectria canker

Disease Rating: 2

Loc.: NC (1)

*Oligoporus guttulatus* (Peck) Gilbertson & Ryv.: brown cubical rot

Syn.: *Polyporus guttulatus* (Peck)

Syn.: *Tyromyces guttulatus* (Peck) Murrill

Syn.: *Tyromyces substipitatus* Murrill

Disease Rating: 3

Loc.: AL (1)

*Oligoporus sericeomollis* (Romell) Pouzar: brown cubical rot

Syn.: *Polyporus sericeomollis* Romell

Syn.: *Poria sericeomollis* (Romell) Egel.

Syn.: *Tyromyces sericeomollis* (Romell) Bondartsev & Singer

Disease Rating: 3

Loc.: NE (1)

*Peniophora pithya* (Pers.) John Eriksson: peniophora

Disease Rating: 4

Loc.: NE (1)

*Peziza sylvestris* (Boud.) Sacc. & A. Trotter: cup fungus

Disease Rating: 4

Loc.: AL (1)

*Phaeolus schweinitzii* (Fr.) Pat.: brown cubical rot

Syn.: *Polyporus schweinitzii* Fr.

Disease Rating: 1

Loc.: NC (2), NE (5), AL (5), C (1)

*Picea glauca* (Moench) Voss, white spruce

*Phellinus pini* (Brot.:Fr.) A. Ames: red ring rot

Syn.: *Fomes pini* (Brot.:Fr.) P. Karsten

Disease Rating: 1

Loc.: N (4), C (1), NC (1)

*Phoma* sp.: needle blight

Disease Rating: 3

Loc.: NW (1)

*Phomopsis* sp.: phomopsis canker

Disease Rating: 3

Loc.: NW (1), SW (2)

*Poria subacida* (Peck) Sacc.: white stringy rot

Disease Rating: 3

Loc.: N (1)

*Pucciniastrum* sp.: needle rust

Disease Rating: 2

Loc.: N (2), NE (3), E (2)

*Pucciniastrum americanum* (Farlow) Arthur: American spruce-raspberry rust

Disease Rating: 3

Loc.: N (1), AL (2)

*Resinicium bicolor* (Alb. & Schwein.:Fr.) Parm.: white stringy rot

Syn.: *Odontia bicolor* (Alb. & Schwein.:Fr.) Quélet

Disease Rating: 3

Loc.: E (1), SW (1)

*Rhinocladia* sp.: chip pile fungus

Disease Rating: 4

Loc.: NE (2), AL (1)

*Rhizosphaera kalkhoffii* Bubák: needle blight

Disease Rating: 2

Loc.: NC (1), NE (1), AL (1), E (3), C (4), SW (3)

*Sarcotrochila piniperda* (Rehm) Korf: snow blight

Syn.: *Phacidium expansum* J. Davis

Disease Rating: 1

Loc.: NC (2), AL (1)

*Schizophyllum commune* Vaill.:Fr.: common split gill

Disease Rating: 4

Loc.: NE (1)

***Picea glauca* (Moench) Voss, white spruce**

*Scytinostroma galactinum* (Fr.) Donk: yellow stringy rot

Syn.: *Corticium galactinum* (Fr.) Burt

Disease Rating: 2

Loc.: N (1)

*Sydowia polyspora* (Bref. & Tav.) E. Müller: needle blight

Anamorph: *Sclerophoma pythiophila* (Corda) Höhnelt

Disease Rating: 3

Loc.: NW (1), NE (1)

*Thelephora terrestris* Ehrh.:Fr.: smothering disease

Disease Rating: 4M

Loc.: NW (1), N (1), E (1), SW (1)

*Trametes hirsuta* (Wulfen:Fr.) Pilát: the hairy conk

Syn.: *Coriolus hirsutus* (Wulfen:Fr.) Quélet

Syn.: *Polyporus hirsutus* Wulfen Fr.

Disease Rating: 3

Loc.: NE (1)

*Trichaptum abietinum* (Dickson:Fr.) Ryv.: pitted sap rot

Syn.: *Polyporus abietinus* Dickson:Fr.

Disease Rating: 4

Loc.: N (1)

*Trybliopsis pinastri* (Pers.:Fr.) P. Karsten: branch canker

Anamorph: *Trybliopycnis pinastri* Höhnelt

Disease Rating: 3

Loc.: NE (1), E (1)

*Tympanis* sp.: tympanis canker

Disease Rating: 3

Loc.: NC (1), NE (1), AL (1)

*Valsa* sp.: cytospora canker

Disease Rating: 3

Loc.: C (1)

*Vericillium* sp.: seedling root rot

Disease Rating: 2

Loc.: NW (1), NC (1), N (1), NE (1), AL (1)

*Picea mariana* (Mill.) B.S.P., black spruce

*Arceuthobium pusillum* Peck<sup>9</sup>: eastern dwarf mistetoe

Disease Rating: 1

Loc.: NW (10), NC (14), N (21), NE (12), AL (4), C (2)

*Armillaria mellea* (Vahl:Fr.) Kummer<sup>10</sup>: armillaria root rot

Syn.: *Armillariella mellea* (Vahl:Fr.) P. Karsten

Disease Rating: 1

Loc.: NW (20), NC (28), N (18), NE (6), AL (3)

*Ascocoryne sarcoides* (Jacq.:Fr.) J.W. Groves & D. Wilson: pink stain

Syn.: *Coryne sarcoides* (Jacq.:Fr.) Tul.

Disease Rating: 3

Loc.: NW (7), NC (3), N (6), NE (7), AL (2)

*Asterodon ferruginosus* Pat.: white rot

Disease Rating: 3

Loc.: NE (1)

*Bjerkandera adusta* (Willd.:Fr.) P. Karsten: scorched conk fungus

Syn.: *Polyporus adustus* Willd.:Fr.

Disease Rating: 4

Loc.: NC (1)

*Botryotinia fuckeliana* (de Bary) Whetzel: gray mold

Syn.: *Sclerotinia fuckeliana* (de Bary) Fuckel

Anamorph: *Botrytis cinerea* Pers.:Fr.

Disease Rating: 1

Loc.: NE (1)

*Cephalosporium* sp.: cephalosporium wilt

Disease Rating: 4

Loc.: NC (3), NE (3), AL (2)

*Cerrena unicolor* (Bull.:Fr.) Murrill: white spongy heart rot

Syn.: *Daedalea unicolor* Bull.:Fr.

Disease Rating: 3

Loc.: AL (1)

*Chlorociboria aeruginascens* (Nyl.) Kanouse ex Ramam., Korf & Batra: blue-green stain

Anamorph: *Dothiorina tulasnei* (Sacc.) Höhnelt

Disease Rating: 4

Loc.: NC (1), N (2)

<sup>9</sup> *A. pusillum* is a parasitic phanerogam, not a fungus.

<sup>10</sup> Recent research has demonstrated that most collections in Ontario identified as *A. mellea* are in fact *A. ostoyae* (Romagn.) Herink.

*Picea mariana* (Mill.) B.S.P., black spruce

*Chrysomyxa arctostaphyli* Dietel: spruce broom rust

Disease Rating: 2

Loc.: NW (8), NC (26), N (22), NE (16)

*Chrysomyxa ledi* (Alb. & Schwein.) de Bary: spruce needle rust

Disease Rating: 2

Loc.: NW (87), NC (42), N (59), NE (27), AL (5)

*Chrysomyxa ledi* (Alb. & Schwein.) de Bary var. *ledi*: small-spored spruce-Labrador-tea rust

Syn.: *Chrysomyxa ledi* (Alb. & Schwein.) de Bary var. *groenlandici* Savile

Disease Rating: 2

Loc.: NW (1), NC (4), N (9)

*Chrysomyxa ledicola* (Peck) Lagerh.: large-spored spruce-Labrador tea rust

Disease Rating: 2

Loc.: NW (61), NC (46), N (71), NE (38), AL (2)

*Chrysomyxa pirolata* (Körn.) Winter: spruce cone rust

Syn.: *Chrysomyxa pyrolae* (DC.) Rostrup

Disease Rating: 2

Loc.: NW (3), NC (9), N (3), NE (2)

*Cladosporium* sp.: needle spot

Disease Rating: 3

Loc.: NW (1), N (1)

*Cladosporium aecidiicola* Thüm.<sup>11</sup>: needle rust parasite

Disease Rating: not applicable

Loc.: NW (1)

*Climacocystis borealis* (Fr.) Kotl. & Pouzar: white mottled rot

Syn.: *Polyporus borealis* Fr.

Syn.: *Tyromyces borealis* (Fr.) Imaz.

Disease Rating: 2

Loc.: NC (1), NE (1)

*Coniophora puteana* (Schumacher:Fr.) P. Karsten: brown cubical rot

Disease Rating: 2

Loc.: NW (1), NE (2)

*Coniothyrium* sp.: conifer coniothyrium

Disease Rating: 3

Loc.: NW (1), NC (1), C (1)

*Cordana pauciseptata* Preuss: blue stain

Disease Rating: 4

Loc.: N (1)

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<sup>11</sup> This fungus colonizes rust pustules and is assumed to be a parasite of the rust.

*Picea mariana* (Mill.) B.S.P., black spruce

*Cryptoporus volvatus* (Peck) Shear: pouch fungus

Syn.: *Polyporus volvatus* Peck

Disease Rating: 4

Loc.: NC (1)

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: N (1)

*Fomitopsis pinicola* (Swartz:Fr.) P. Karsten: brown crumbly rot

Syn.: *Fomes pinicola* (Swartz:Fr.) Cooke

Syn.: *Polyporus pinicola* Swartz:Fr.

Disease Rating: 2

Loc.: NC (1), N (3), NE (4)

*Fomitopsis rosea* (Alb. & Schwein.:Fr.) P. Karsten: rose-colored conk

Syn.: *Fomes roseus* (Alb. & Schwein.:Fr.) P. Karsten

Syn.: *Polyporus roseus* Alb. & Schwein.:Fr.

Disease Rating: 3

Loc.: NW (1)

*Ganoderma applanatum* (Pers.) Pat.: artist's conk

Syn.: *Fomes applanatus* (Pers.:Wallr.) C. Gillet

Syn.: *Polyporus applanatus* (Pers.) Wallr.

Disease Rating: 3

Loc.: NE (1)

*Ganoderma lucidum* (W. Curtis:Fr.) P. Karsten: varnished conk

Syn.: *Polyporus lucidus* W. Curtis:Fr.

Disease Rating: 3

Loc.: N (1)

*Gliocladium* sp.: gliocladium stain

Disease Rating: 4

Loc.: NC (1), NE (1)

*Gliocladium roseum* (Link) Bainier: gliocladium stain

Disease Rating: 4

Loc.: NW (2), NC (2), N (3), NE (2), AL (1)

*Gloeophyllum protractum* (Fr.) Imaz.: brown cubical rot

Syn.: *Trametes protracta* Fr.

Disease Rating: 4

Loc.: NE (2)

*Gloeophyllum saepiarium* (Wulfen:Fr.) P. Karsten: brown cubical rot

Syn.: *Daedalea saepiaria* Wulfen:Fr.

Syn.: *Lenzites saepiaria* (Wulfen:Fr.) Fr.

Disease Rating: 4

Loc.: NC (2), N (1)

*Picea mariana* (Mill.) B.S.P., black spruce

*Haematostereum sanguinolentum* (Alb. & Schwein.:Fr.) Pouzar: red heart rot

Syn.: *Stereum sanguinolentum* (Alb. & Schwein.:Fr.) Fr.

Disease Rating: 2

Loc.: NW (1)

*Hendersonia* sp.: needle blight

Disease Rating: 3

Loc.: NC (1), N (2)

*Hormiscium* sp.: hormiscium

Disease Rating: 4

Loc.: NW (1), NC (1), NE (1)

*Hormodendrum* sp.: wood stain

Disease Rating: 4

Loc.: NW (1), NC (2), N (1), NE (1), C (1)

*Hymenochaete corrugata* (Fr.:Fr.) Lév.: toothed crust fungus

Disease Rating: 4

Loc.: NW (1)

*Inonotus circinatus* (Fr.) Gilbertson: circinatus root rot

Syn.: *Polyporus circinatus* Fr.

Disease Rating: 1

Loc.: N (1)

*Inonotus tomentosus* (Fr.) Teng: tomentosus root rot

Syn.: *Polyporus tomentosus* Fr.

Disease Rating: 1

Loc.: NW (4), NC (8), N (6), NE (9), E (1)

*Isthmiella* sp.: isthmiella needle cast

Syn.: *Bifusella* sp.

Disease Rating: 3

Loc.: N (1)

*Isthmiella crepidiformis* (Darker) Darker: isthmiella needle cast

Syn.: *Bifusella crepidiformis* Darker

Disease Rating: 3

Loc.: NW (1), NC (5), N (23), NE (7), AL (3)

*Leucostoma kunzei* (Fr.) Munk: cytospora canker

Syn.: *Valsa kunzei* Fr.

Anamorph: *Cytospora kunzei* Sacc.

Disease Rating: 2

Loc.: NC (3)

*Picea mariana* (Mill.) B.S.P., black spruce

*Lirula macrospora* (Hartig) Darker: lirula needle cast of spruce

Syn.: *Lophodermium filiforme* Darker

Syn.: *Lophodermium macrosporum* (Hartig) Rehm

Anamorph: *Hypodermina hartigii* Hilitzer

Disease Rating: 3

Loc.: NC (2)

*Lophium mytilinum* (Pers.) Fr.: mussel shell fungus

Disease Rating: 4

Loc.: NC (2)

*Lophodermium* sp.: needle cast

Disease Rating: 3

Loc.: NW (1), AL (1)

*Lophodermium piceae* (Fuckel) Höhnelt: spruce needle cast

Disease Rating: 3

Loc.: NC (2), N (2), NE (2), NW (1)

*Mycena galericulata* (Scop.:Fr.) Gray: common mycena

Disease Rating: 4

Loc.: NC (1)

*Oligoporus balsameus* (Peck) Gilbertson & Ryv.: brown cubical butt rot

Syn.: *Polyporus balsameus* Peck

Syn.: *Tyromyces balsameus* (Peck) Murrill

Disease Rating: 4

Loc.: N (2)

*Oligoporus sericeomollis* (Romell) Pouzar: brown cubical rot

Syn.: *Polyporus sericeomollis* Romell

Syn.: *Poria sericeomollis* (Romell) Egel.

Syn.: *Tyromyces sericeomollis* (Romell) Bondartsev & Singer

Disease Rating: 3

Loc.: N (1)

*Panus rudis* Fr.: ruddy panus

Disease Rating: 4

Loc.: NC (1)

*Phaeolus schweinitzii* (Fr.) Pat.: brown cubical rot

Syn.: *Polyporus schweinitzii* Fr.

Disease Rating: 1

Loc.: NW (1), N (1), NE (2), AL (1)

*Phellinus pini* (Brot.:Fr.) A. Ames: red ring rot

Syn.: *Fomes pini* (Brot.:Fr.) P. Karsten

Disease Rating: 1

Loc.: N (2)

*Picea mariana* (Mill.) B.S.P., black spruce

*Phoma* sp.: needle blight

Disease Rating: 3

Loc.: NW (2), N (1)

*Rhinocladia* sp.: chip pile fungus

Disease Rating: 4

Loc.: N (3)

*Rhizina undulata* Fr.: tea pot fungus

Syn.: *Rhizina inflata* P. Karsten

Disease Rating: 3

Loc.: NW (2), NC (2), NE (1)

*Rhizosphaera kalkhoffii* Bubák: needle blight

Disease Rating: 2

Loc.: NC (3), N (1)

*Scytinostroma galactinum* (Fr.) Donk: yellow stringy rot

Syn.: *Corticium galactinum* (Fr.) Burt

Disease Rating: 2

Loc.: NC (1)

*Septonema* sp.: bark-inhabiting septonema

Disease Rating: 4

Loc.: NE (1)

*Serpula* sp.: dry rot fungus

Syn.: *Merulius* sp.

Disease Rating: 3

Loc.: NW (1), N (1)

*Serpula himantoides* (Fr.) P. Karsten: brown cubical dry rot

Syn.: *Merulius himantoides* Fr.

Disease Rating: 2

Loc.: NW (1)

*Serpula lacrimans* (Wulfen:Fr.) Schröter: dry rot fungus

Syn.: *Merulius lacrimans* Fr.

Disease Rating: 2

Loc.: NW (1)

*Sirococcus conigenus* (DC.) P. Cannon & Minter: shoot blight

Syn.: *Ascochyta piniperda* Lindau

Syn.: *Discella strobilina* (Desm.) Died.

Syn.: *Sirococcus strobilinus* Preuss

Disease Rating: 2

Loc.: NC (1)

*Picea mariana* (Mill.) B.S.P., black spruce

*Sistotrema brinkmannii* (Bresad.) John Eriksson: white stringy rot

Syn.: *Odontia brinkmannii* Bresad.

Syn.: *Trechispora brinkmannii* (Bresad.) Rogers & H. Jackson

Disease Rating: 4

Loc.: NE (1), N (1)

*Stemphylium* sp.: dead bark colonizer

Disease Rating: 4

Loc.: NC (1)

*Sydowia polyspora* (Bref. & Tav.) E. Müller: needle blight

Anamorph: *Sclerophoma pythiophila* (Corda) Höhnelt

Disease Rating: 3

Loc.: NW (1)

*Tremella* sp.: jelly fungus

Disease Rating: 4

Loc.: NW (1)

*Trichaptum abietinum* (Dickson:Fr.) Ryv.: pitted sap rot

Syn.: *Polyporus abietinus* Dickson:Fr.

Disease Rating: 4

Loc.: NW (1), N (1)

*Verticicladiella* sp.: black root stain

Disease Rating: 1

Loc.: NC (1)

*Verticillium* sp.: seedling root rot

Disease Rating: 2

Loc.: NC (3), NE (4)



*Picea pungens* Engelm., blue spruce

*Arceuthobium pusillum* Peck<sup>12</sup>: dwarf mistletoe

Disease Rating: 1

Loc.: NW (1)

*Botryotinia fuckeliana* (de Bary) Whetzel: gray mold

Syn.: *Sclerotinia fuckeliana* (de Bary) Fuckel

Anamorph: *Botrytis cinerea* Pers.:Fr.

Disease Rating: 1

Loc.: SW (3)

*Chaetomium* sp.: chaetomium

Disease Rating: 4

Loc.: SW (1)

*Chrysomyxa ledi* (Alb. & Schwein.) de Bary<sup>13</sup>: spruce needle rust

Disease Rating: 2

Loc.: NW (1), N (4)

*Chrysomyxa ledicola* (Peck) Lagerh.: large-spored spruce-Labrador-tea rust

Disease Rating: 2

Loc.: NW (1), N (3)

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: C (1)

*Epicoccum* sp.: epicoccum

Disease Rating: 4

Loc.: SW (1)

*Hormiscium* sp.: hormiscium

Disease Rating: 4

Loc.: SW (1)

*Leucostoma kunzei* (Fr.) Munk: cytospora canker

Syn.: *Valsa kunzei* Fr.

Anamorph: *Cytospora kunzei* Sacc.

Disease Rating: 2

Loc.: NE (1), AL (2), E (5), C (7), SW (6)

*Melanomma* sp.: spruce twig fungus

Disease Rating: 4

Loc.: SW (1)

<sup>12</sup> *A. pusillum* is a parasitic phanerogam, not a fungus.

<sup>13</sup> No variety had been determined for any of the collections listed.

*Picea pungens* Engelm., blue spruce

*Pestalotia* sp.: needle and shoot blight

Disease Rating: 4

Loc.: SW (2)

*Phomopsis* sp.: phomopsis canker

Disease Rating: 3

Loc.: SW (1)

*Rhizosphaera kalkhoffii* Bubák: needle blight

Disease Rating: 2

Loc.: NE (2), E (1), C (3), SW (7)

*Siroccus conigenus* (DC.) P. Cannon & Minter: shoot blight

Syn.: *Ascochyta piniperda* Lindau

Syn.: *Discella strobilina* (Desm.) Died.

Syn.: *Siroccus strobilinus* Preuss

Disease Rating: 2

Loc.: SW (8)

*Sydowia polyspora* (Bref. & Tav.) E. Müller: needle blight

Anamorph: *Sclerophoma pythiophila* (Corda) Höhnelt

Disease Rating: 3

Loc.: E (1)

*Picea rubens* Sarg., red spruce

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: N (1), E (1)

*Dichomitus squalens* (P. Karsten) Reid: red ray rot

Syn.: *Polyporus anceps* Peck

Disease Rating: 2

Loc.: AL (1)

*Pestalotia* sp.: needle and shoot blight

Disease Rating: 4

Loc.: C (1)

*Phoma* sp.: needle blight

Disease Rating: 3

Loc.: AL (1)

*Scytinostroma galactinum* (Fr.) Donk: yellow stringy rot

Syn.: *Corticium galactinum* (Fr.) Burt

Disease Rating: 2

Loc.: AL (1)

*Pseudotsuga* spp., Douglas-fir

*Armillaria mellea* (Vahl:Fr.) Kummer<sup>14</sup>: armillaria root rot

Syn.: *Armillariella mellea* (Vahl:Fr.) P. Karsten

Disease Rating: 1

Loc.: C (3)

*Lophodermium* sp.: needle cast

Disease Rating: 3

Loc.: C (1)

*Phaeocryptopus gaeumannii* (Rohde) Petrak: Swiss needle cast

Syn.: *Adelopus gaeumannii* Rohde

Disease Rating: 2

Loc.: C (3)

*Rhabdocline pseudotsugae* Sydow: Douglas-fir needle cast

Disease Rating: 2

Loc.: C (1)

*Valsa abietis* Fr.: cytospora canker

Anamorph: *Cytospora abietis* Sacc.

Disease Rating: 3

Loc.: SW (1)

<sup>14</sup> Recent research has demonstrated that most collections in Ontario identified as *A. mellea* are in fact *A. ostoyae* (Romagn.) Herink.



***Pseudotsuga menziesii* (Mirb.) Franco, Douglas-fir**

*Phaeocryptopus gaeumannii* (Rohde) Petrak: Swiss needle cast

Syn.: *Adelopus gaeumannii* Rohde

Disease Rating: 2

Loc.: C (1)

*Rhabdocline* sp.: Douglas-fir needle cast

Disease Rating: 2

Loc.: C (1)

*Rhabdocline pseudotsugae* Sydow: Douglas-fir needle cast

Disease Rating: 2

Loc.: C (1)

*Sphaeropsis* sp.: diplodia canker

Disease Rating: 2

Loc.: C (1)

*Sydowia polyspora* (Bref. & Tav.) E. Müller: sclerophoma needle blight

Anamorph: *Sclerophoma pythiophila* (Corda) Höhnelt

Disease Rating: 3

Loc.: N (1)

***Taxus* spp., yew**

*Celluloseporium* sp.: balsam cytosporium

Syn.: *Cytosporium* sp.

Disease Rating: 4

Loc.: C (1)

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: C (1)



*Thuja occidentalis* L., eastern white cedar

*Armillaria mellea* (Vahl:Fr.) Kummer<sup>15</sup>: armillaria root rot

Syn.: *Armillariella mellea* (Vahl:Fr.) P. Karsten

Disease Rating: 1

Loc.: NC (1), NE (1), AL (2), C (3), SW (3)

*Ceratocystis* sp.: blue stain

Disease Rating: 2

Loc.: SW (1)

*Coniophora puteana* (Schumacher:Fr.) P. Karsten: brown cubical rot

Disease Rating: 2

Loc.: AL (1)

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: NW (1), NC (1), SW (1)

*Cytospora* sp.: shoot blight

Disease Rating: 3

Loc.: NE (1)

*Didymascella thujina* (E. Durand) Maire: keithia needle blight

Syn.: *Keithia thujina* E. Durand

Disease Rating: 2

Loc.: NE (1)

*Epicoccum purpurascens* Ehrenb. ex Schlecht.: epicoccum

Syn.: *Epicoccum nigrum* Link

Disease Rating: 4

Loc.: N (1)

*Guignardia philoprina* (Berk. & M.A. Curtis) v.d. Aa: cedar needle blight

Anamorph: *Phyllosticta concentrica* Sacc.

Disease Rating: 3

Loc.: C (2)

*Hormodendrum* sp.: wood stain

Disease Rating: 4

Loc.: AL (1)

*Macrophoma* sp.: needle blight

Disease Rating: 3

Loc.: N (2)

<sup>15</sup> Recent research has demonstrated that most collections in Ontario identified as *A. mellea* are in fact *A. ostoyae* (Romagn.) Herink.

*Thuja occidentalis* L., eastern white cedar

*Nectria cinnabarina* (Tode:Fr.) Fr.: nectria canker

Syn.: *Sphaeria cinnabarina* Tode

Anamorph: *Tubercularia vulgaris* Tode:Fr.

Disease Rating: 2

Loc.: SW (1)

*Pestalotia* sp.: needle and shoot blight

Disease Rating: 4

Loc.: NC (1), NE (1), E (2), C (1), SW (5)

*Pestalotiopsis funerea* (Desm.) Stey.: needle and shoot blight

Syn.: *Pestalotia funerea* Desm.

Disease Rating: 3

Loc.: E (2), AL (1)

*Phaeolus schweinitzii* (Fr.) Pat.: brown cubical rot

Syn.: *Polyporus schweinitzii* Fr.

Disease Rating: 1

Loc.: E (1)

*Phoma* sp.: needle blight

Disease Rating: 3

Loc.: NC (1), N (1), NE (1)

*Phomopsis* sp.: phomopsis canker

Disease Rating: 3

Loc.: AL (2)

*Phomopsis juniperovora* Hahn: phomopsis blight

Disease Rating: 2

Loc.: NE (1), AL (1)

*Poria subacida* (Peck) Sacc.: white stringy rot

Disease Rating: 3

Loc.: NE (1)

*Resinicium bicolor* (Alb. & Schwein.:Fr.) Parm.: white stringy rot

Syn.: *Odontia bicolor* (Alb. & Schwein.:Fr.) Quélet

Disease Rating: 3

Loc.: NE (1)

*Sydowia polyspora* (Bref. & Tav.) E. Müller: needle blight

Anamorph: *Sclerophoma pythiophila* (Corda) Höhnelt

Disease Rating: 3

Loc.: N (1), NE (1)

*Truncatella angustata* (Pers.) Hughes: needle blight

Syn.: *Truncatella truncata* (Lév.) Stey.

Disease Rating: 4

Loc.: N (1)

*Verticillium* sp.: seedling root rot

Disease Rating: 2

Loc.: E (1)

***Tsuga* spp., hemlock**

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: C (1), SW (1)

*Melampsora abietis-canadensis* C.A. Ludwig ex Arthur: hemlock-poplar rust

Disease Rating: 3

Loc.: SW (1)

***Tsuga canadensis* (L.) Carr., eastern hemlock**

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Loc.: C (1)

*Fabrella tsugae* (Farlow) Kirschst.: hemlock needle blight

Disease Rating: 3

Loc.: NE (1)

*Ganoderma tsugae* Murrill: hemlock varnished conk

Syn.: *Polyporus tsugae* (Murrill) Overh.

Disease Rating: 2

Loc.: AL (2), E (1)

*Melampsora abietis-canadensis* C.A. Ludwig ex Arthur: hemlock-poplar rust

Disease Rating: 3

Loc.: AL (2), E (8), C (3), SW (1)

*Melampsora epitea* Thüm. f. sp. *tsugae* Ziller: hemlock-willow rust

Disease Rating: 3

Loc.: SW (1)

*Pucciniastrum vaccinii* (Winter) Jørstad: hemlock-blueberry rust

Disease Rating: 3

Loc.: E (3)

*Tympanis* spp.: tympanis canker

Disease Rating: 3

Loc.: AL (1)



**FUNGUS/HOST LISTING**



*Aleurodiscus amorphus* (Pers.:Fr.) Schröter: white rot and canker of balsam fir

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: N (1), NE (1), C (1)

*Amylostereum chailletii* (Pers.:Fr.) Boidin: wood wasp sterium

Syn.: *Stereum chailletii* (Pers.:Fr.) Fr.

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1)

*Antrodia variiformis* (Peck) Donk: brown trunk rot

Syn.: *Coriolellus variiformis* (Peck) Sarkar

Syn.: *Polyporus variiformis* Peck

Syn.: *Trametes variiformis* Peck

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

*Aplosporella* sp.: needle blight

Alternate spelling: *Haplosporella* sp.

Disease Rating: 4

Host: *Juniperus virginiana* L.

Loc.: E (1)

*Arceuthobium pusillum* Peck<sup>16</sup>: eastern dwarf mistletoe

Disease Rating: 1

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1), N (1), NE (1), E (3), SW (8)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (10), NC (14), N (21), NE (12), AL (4), C (2)

Host: *Picea pungens* Engelm.

Loc.: NW (1)

*Armillaria mellea* (Vahl:Fr.) Kummer<sup>17</sup>: armillaria root rot

Syn.: *Armillariella mellea* (Vahl:Fr.) P. Karsten

Disease Rating: 1

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (5), NC (15), N (12), NE (7), AL (9), C (3), SW (1)

Host: *Larix decidua* Mill.

Loc.: NW (1)

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: NC (1), AL (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NW (6), NC (19), N (13), NE (3), AL (3), C (3), SW (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (20), NC (28), N (18), NE (6), AL (3)

Host: *Pseudotsuga* spp.

Loc.: C (3)

Host: *Thuja occidentalis* L.

Loc.: NC (1), NE (1), AL (2), C (3), SW (3)

<sup>16</sup> *A. pusillum* is a parasitic phanerogam, not a fungus.

<sup>17</sup> Recent research has demonstrated that most collections identified as *A. mellea* in Ontario are in fact *A. ostoyae* (Romagn.) Herink.

*Ascocalyx abietina* (Lagerb.) Schläpfer-Bernhard: scleroderris canker

Syn.: *Gremmeniella abietina* (Lagerb.) Morelet

Syn.: *Scleroderris lagerbergii* Gremmen

Anamorph: *Brunchorstia pinea* (P. Karsten) Höhnelt

Disease Rating: 1

Host: *Picea glauca* (Moench) Voss

Loc.: N (1)

*Ascocalyx abietis* Naumov: balsam twig blight

Syn.: *Godronia abietis* (Naumov) Seaver

Anamorph: *Bothrodiscus berenice* (Berk. & M.A. Curtis) J.W. Groves

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: AL (1)

*Ascocoryne sarcoides* (Jacq.:Fr.) J.W. Groves & D. Wilson: pink stain

Syn.: *Coryne sarcoides* (Jacq.:Fr.) Tul.

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1), NC (4), NE (5), AL (1), C (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (7), NC (3), N (6), NE (7), AL (2)

*Asterodon ferruginosus* Pat.: white rot

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: N (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NE (1)

*Biatorella resinae* (Fr.) Mudd: resin cup fungus

Syn.: *Tromera resinae* (Fr.) Körber

Anamorph: *Zythia resinae* (Ehrenb.:Fr.) P. Karsten

Syn.: *Pycnidiella resinae* (Ehrenb.:Fr.) Höhnelt

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: N (1), AL (1), E (1), SW (1)

*Bjerkandera adusta* (Willd.:Fr.) P. Karsten: scorched conk fungus

Syn.: *Polyporus adustus* Willd.:Fr.

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: NC (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1)

*Botryotinia fuckeliana* (de Bary) Whetzel: gray mold

Syn.: *Sclerotinia fuckeliana* (de Bary) Fuckel

Anamorph: *Botrytis cinerea* Pers.:Fr.

Disease Rating: 1

Host: *Abies balsamea* (L.) Mill.

Loc.: SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: N (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NE (1)

Host: *Picea pungens* Engelm.

Loc.: SW (3)

*Celluloporum* sp.: balsam cytosporium

Syn.: *Cytosporium* sp.

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (1), AL (1)

Host: *Taxus* spp.

Loc.: C (1)

*Cenangium acuum* Cooke & Peck: twig blight

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

*Cephalosporium* sp.: cephalosporium wilt

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NC (1), N (2), NE (3), E (1), C (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NE (2)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (3), NE (3), AL (2)

*Ceratocystis* sp.: blue stain

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: N (1)

Host: *Thuja occidentalis* L.

Loc.: SW (1)

*Cerrena unicolor* (Bull.:Fr.) Murrill: white spongy heart rot

Syn.: *Daedalea unicolor* Bull.:Fr.

Disease Rating: 3

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: AL (1)

*Chaetomium* sp.: chaetomium

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (2)

Host: *Picea pungens* Engelm.

Loc.: SW (1)

*Chaetomium globosum* Kunze:Fr.: olive-green mold

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

*Chloridium* sp.: green stain

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: NC (1)

*Chlorociboria* sp.: blue-green stain

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: NC (1)

*Chlorociboria aeruginascens* (Nyl.) Kanouse ex Ramam., Korf & Batra: blue-green stain

Anamorph: *Dothiorina tulasnei* (Sacc.) Höhnelt

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (1), N (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NE (2)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1), N (2)

*Chrysomyxa arctostaphyli* Dietel: spruce broom rust

Disease Rating: 2

Host: *Picea glauca* (Moench) Voss

Loc.: NW (2), NC (5), NE (4)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (8), NC (26), N (22), NE (16)

*Chrysomyxa ledi* (Alb. & Schwein.) de Bary: spruce needle rust<sup>18</sup>

Disease Rating: 2

Host: *Picea* spp.

Loc.: NC (1), N (3)

Host: *Picea glauca* (Moench) Voss

Loc.: NW (25), NC (17), N (23), NE (13), AL (5), E (2), C (2)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (87), NC (42), N (59), NE (27), AL (5)

Host: *Picea pungens* Engelm.

Loc.: NW (1), N (4)

<sup>18</sup> No variety had been determined for any of the collections listed.

*Chrysomyxa ledi* (Alb. & Schwein.) de Bary var. *ledi*: small-spored spruce-Labrador tea rust

Syn.: *Chrysomyxa ledi* (Alb. & Schwein.) de Bary var. *groenlandici* Savile

Disease Rating: 2

Host: *Picea glauca* (Moench) Voss

Loc.: NW (3), N (10), NE (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1), NC (4), N (9)

*Chrysomyxa ledicola* (Peck) Lagerh.: large-spored spruce-Labrador tea rust

Disease Rating: 2

Host: *Picea glauca* (Moench) Voss

Loc.: NW (19), NC (29), N (40), NE (24), AL (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (61), NC (46), N (71), NE (38), AL (2)

Host: *Picea pungens* Engelm.

Loc.: NW (1), N (3)

*Chrysomyxa pirolata* (Körn.) Winter: spruce cone rust

Syn.: *Chrysomyxa pyrolae* (DC.) Rostrup

Disease Rating: 2

Host: *Picea glauca* (Moench) Voss

Loc.: NW (3), NC (20), N (6), NE (7), AL (7), E (2), C (3)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (3), NC (9), N (3), NE (2)

*Chrysomyxa weirii* H. Jackson: Weir's spruce-cushion rust

Disease Rating: 2

Host: *Picea glauca* (Moench) Voss

Loc.: E (2)

*Cladosporium* sp.: needle spot

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1), NE (2)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1), N (1)

*Cladosporium aecidiicola* Thüm.<sup>19</sup>: needle rust parasite

Disease Rating: not applicable

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1)

*Climacocystis borealis* (Fr.) Kotl. & Pouzar: white mottled rot

Syn.: *Polyporus borealis* Fr.

Syn.: *Tyromyces borealis* (Fr.) Imaz.

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1)

(cont'd)

<sup>19</sup> This fungus colonizes rust pustules and is assumed to be a parasite of the rust.

*Climacocystis borealis* (Fr.) Kottl. & Pouzar: white mottled rot (concl.)

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1), NE (1)

*Coniophora puteana* (Schumacher:Fr.) P. Karsten: brown cubical rot

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NC (1), N (2), NE (3), AL (4), C (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NE (3), AL (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1), NE (2)

Host: *Thuja occidentalis* L.

Loc.: AL (1)

*Coniothyrium* sp.: conifer coniothyrium

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), N (1), NE (1)

Host: *Juniperus virginiana* L.

Loc.: E (1)

Host: *Picea abies* (L.) Karst.

Loc.: SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: E (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1), NC (1), C (1)

*Conocybe tenera* (Schäffer:Fr.) Fayod: brown dunce cap

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

*Cordana pauciseptata* Preuss: blue stain

Disease Rating: 4

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: N (1)

*Cryptoporus volvatus* (Peck) Shear: pouch fungus

Syn. *Polyporus volvatus* Peck

Disease Rating: 4

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1)

*Cytospora* sp.: cytospora canker

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: N (2), NE (2), AL (2), E (2), C (1), SW (1)

(cont'd)

*Cytospora* sp.: cytospora canker (concl.)

Host: *Abies lasiocarpa* (Hook.) Nutt.

Loc.: NW (1)

Host: *Juniperus* spp.

Loc.: NE (1)

Host: *Juniperus virginiana* L.

Loc.: E (7), SW (1)

Host: *Larix* spp.

Loc.: E (1)

Host: *Larix decidua* Mill.

Loc.: C (2), SW (2)

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: NC (2), N (2), E (1), SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NE (3), E (1), C (1), SW (3)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: N (1)

Host: *Picea pungens* Engelm.

Loc.: C (1)

Host: *Picea rubens* Sarg.

Loc.: N (1), E (1)

Host: *Taxus* spp.

Loc.: C (1)

Host: *Thuja occidentalis* L.

Loc.: NW (1), NC (1), SW (1)

Host: *Tsuga* spp.

Loc.: C (1), SW (1)

Host: *Tsuga canadensis* (L.) Carr.

Loc.: C (1)

*Cytospora* sp.: shoot blight

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: AL (1)

Host: *Thuja occidentalis* L.

Loc.: NE (1)

*Delphinella balsameae* (Waterman) E. Müller: tip blight

Syn.: *Rehmiellopsis balsameae* Waterman

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (2)

*Dermea* sp.: dermea canker

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

*Dermea balsamea* (Peck) Seaver: dermea twig canker

Anamorph: *Foveostroma abietinum* (Peck) Di Cosmo

Syn.: *Gelatinosporium abietinum* Peck

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NC (2), N (3), NE (2), AL (2), C (1), SW (1)

*Dichomitus squalens* (P. Karsten) Reid: red ray rot

Syn.: *Polyporus anceps* Peck

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: N (1), C (1)

Host: *Picea rubens* Sarg.

Loc.: AL (1)

*Didymascella thujina* (E. Durand) Maire: keithia needle blight

Syn.: *Keithia thujina* E. Durand

Disease Rating: 2

Host: *Juniperus virginiana* L.

Loc.: E (1)

Host: *Thuja occidentalis* L.

Loc.: NE (1)

*Dinemasporium* sp.: dendrophoma

Disease Rating: 4

Host: *Picea abies* (L.) Karst.

Loc.: SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: C (1), SW (1)

*Diplodia* sp.: diplodia canker

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NC (1)

Host: *Juniperus virginiana* L.

Loc.: E (1)

*Epicoccum* sp.: epicoccum

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

Host: *Picea pungens* Engelm.

Loc.: SW (1)

*Epicoccum purpurascens* Ehrenb. ex Schlecht.: epicoccum

Syn.: *Epicoccum nigrum* Link

Disease Rating: 4

Host: *Larix decidua* Mill.

Loc.: SW (1)

Host: *Thuja occidentalis* L.

Loc.: N (1)

*Fabrella tsugae* (Farlow) Kirschst.: hemlock needle blight

Disease Rating: 3

Host: *Tsuga canadensis* (L.) Carr.

Loc.: NE (1)

*Fomitopsis cajanderi* (P. Karsten) Kotl. & Pouzar: pink-colored conk

Syn.: *Fomes cajanderi* P. Karsten

Syn.: *Fomes subroseus* (Weir) Overh.

Syn.: *Trametes subrosea* Weir

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: AL (1), E (1)

*Fomitopsis pinicola* (Swartz:Fr.) P. Karsten: brown crumbly rot

Syn.: *Fomes pinicola* (Swartz:Fr.) Cooke

Syn.: *Polyporus pinicola* Swartz:Fr.

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NC (1), N (1)

Host: *Larix decidua* Mill.

Loc.: AL (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NC (1), N (3), NE (2), AL (1), E (1), SW (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1), N (3), NE (4)

*Fomitopsis rosea* (Alb. & Schwein.:Fr.) P. Karsten: rose-colored conk

Syn.: *Fomes roseus* (Alb. & Schwein.:Fr.) P. Karsten

Syn.: *Polyporus roseus* Alb. & Schwein.:Fr.

Disease Rating: 3

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1)

*Fumago* sp.: sooty mold

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (1)

*Fusicoccum* sp.: needle blight

Disease Rating: 3

Host: *Juniperus virginiana* L.

Loc.: AL (1)

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: SW (1)

*Ganoderma applanatum* (Pers.) Pat.: artist's conk

Syn.: *Fomes applanatus* (Pers.:Wallr.) C. Gillet

Syn.: *Polyporus applanatus* (Pers.) Wallr.

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NE (1)

*Ganoderma lucidum* (W. Curtis:Fr.) P. Karsten: varnished conk  
Syn.: *Polyporus lucidus* W. Curtis:Fr.  
Disease Rating: 3  
Host: *Picea mariana* (Mill.) B.S.P.  
Loc.: N (1)

*Ganoderma tsugae* Murrill: hemlock varnished conk  
Syn.: *Polyporus tsugae* (Murrill) Overh.  
Disease Rating: 2  
Host: *Tsuga canadensis* (L.) Carr.  
Loc.: AL (2), E (1)

*Gelatinosporium* sp.: stem canker  
Syn.: *Micropera* sp.  
Disease Rating: 3  
Host: *Abies balsamea* (L.) Mill.  
Loc.: N (1), AL (3), SW (1)  
Host: *Juniperus virginiana* L.  
Loc.: E (1)

*Gliocladium* sp.: gliocladium stain  
Disease Rating: 4  
Host: *Picea glauca* (Moench) Voss  
Loc.: N (1)  
Host: *Picea mariana* (Mill.) B.S.P.  
Loc.: NC (1), NE (1)

*Gliocladium roseum* (Link) Bainier: gliocladium stain  
Disease Rating: 4  
Host: *Abies balsamea* (L.) Mill.  
Loc.: NW (1)  
Host: *Picea glauca* (Moench) Voss  
Loc.: NW (1), NC (3), N (1), NE (4)  
Host: *Picea mariana* (Mill.) B.S.P.  
Loc.: NW (2), NC (2), N (3), NE (2), AL (1)

*Gloeophyllum protractum* (Fr.) Imaz.: brown cubical rot  
Syn.: *Trametes protracta* Fr.  
Disease Rating: 4  
Host: *Abies balsamea* (L.) Mill.  
Loc.: NW (1), NE (1), E (1)  
Host: *Picea mariana* (Mill.) B.S.P.  
Loc.: NE (2)

*Gloeophyllum saepiarium* (Wulfen:Fr.) P. Karsten: brown cubical rot  
Syn.: *Daedalea saepiaria* Wulfen:Fr.  
Syn.: *Lenzites saepiaria* (Wulfen:Fr.) Fr.  
Disease Rating: 4  
Host: *Picea glauca* (Moench) Voss  
Loc.: N (4)  
Host: *Picea mariana* (Mill.) B.S.P.  
Loc.: NC (2), N (1)

*Gloeophyllum trabeum* (Pers.:Fr.) Murrill: brown cubical rot

Syn.: *Daealea trabea* Fr.

Syn.: *Lenzites trabea* Pers.:Fr.

Disease Rating: 4

Host: *Picea abies* (L.) Karst.

Loc.: SW (1)

*Gloeosporium* sp.: branch canker

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (1)

*Guignardia philoprina* (Berk. & M.A. Curtis) v. d. Aa: cedar needle blight

Anamorph: *Phyllosticta concentrica* Sacc.

Disease Rating: 3

Host: *Thuja occidentalis* L.

Loc.: C (2)

*Gymnosporangium* sp.: juniper rust

Disease Rating: 3

Host: *Juniperus* spp.

Loc.: SW (1)

Host: *Juniperus virginiana* L.

Loc.: E (1)

*Gymnosporangium clavariiforme* (Pers.) DC.: clavariiform juniper rust

Disease Rating: 2

Host: *Juniperus communis* var. *depressa* Pursh

Loc.: NW (1)

*Gymnosporangium clavipes* (Cooke & Peck) Cooke & Peck: quince rust

Disease Rating: 2

Host: *Juniperus* spp.

Loc.: NE (1), SW (3)

Host: *Juniperus communis* L.

Loc.: NE (1), SW (1)

Host: *Juniperus communis* var. *depressa* Pursh

Loc.: E (1)

Host: *Juniperus horizontalis* Moench

Loc.: NC (1)

Host: *Juniperus virginiana* L.

Loc.: E (5), SW (4)

*Gymnosporangium globosum* Farlow: globose gall rust

Syn.: *Roestelia lacerata* Tul.

Disease Rating: 3

Host: *Juniperus* spp.

Loc.: C (6)

Host: *Juniperus virginiana* L.

Loc.: E (4), C (3), SW (5)

*Gymnosporangium juniperi-virginianae* Schwein.: cedar-apple rust

Disease Rating: 2

Host: *Juniperus* spp.

Loc.: SW (1)

Host: *Juniperus virginiana* L.

Loc.: E (11), SW (7)

*Gymnosporangium nelsonii* Arthur: Nelson's juniper rust

Syn.: *Gymnosporangium corniculans* Kern

Disease Rating: 3

Host: *Juniperus* spp.

Loc.: SW (1)

*Haematostereum sanguinolentum* (Alb. & Schwein.:Fr.) Pouzar: red heart rot

Syn.: *Stereum sanguinolentum* (Alb. & Schwein.:Fr.) Fr.

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NC (3), N (2), NE (3)

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1), NE (1), AL (1), E (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1)

*Hainesia* sp.: dead bark colonizer

Disease Rating: 4

Host: *Juniperus virginiana* L.

Loc.: AL (1)

*Hendersonia* sp.: needle blight

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (1)

Host: *Juniperus virginiana* L.

Loc.: E (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1), N (2)

*Heterobasidion annosum* (Fr.) Bref.: fomes root rot

Syn.: *Fomes annosus* (Fr.) P. Karsten

Anamorph: *Spiniger meineckellus* (A. Olson) Stalpers

Disease Rating: 1

Host: *Juniperus virginiana* L.

Loc.: SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: SW (2)

*Hormiscium* sp.: hormiscium

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (2)

(cont'd)

*Hormiscium* sp.: hormiscium (concl.)

Host: *Larix* spp.

Loc.: N (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1), NC (1), NE (1)

Host: *Picea pungens* Engelm.

Loc.: SW (1)

*Hormodendrum* sp.: wood stain

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NE (2), AL (1)

Host: *Juniperus virginiana* L.

Loc.: E (3), C (1)

Host: *Larix* spp.

Loc.: SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: N (2), NE (2), AL (1), SW (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1), NC (2), N (1), NE (1), C (1)

Host: *Thuja occidentalis* L.

Loc.: AL (1)

*Hydnellum* sp.: hydnellum

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: N (1)

*Hymenochaete corrugata* (Fr.:Fr.) Lév.: toothed crust fungus

Disease Rating: 4

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1)

*Hypodermella* sp.: needle cast

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), N (1), NE (1)

*Hypodermella laricis* Tubeuf: larch needle cast

Disease Rating: 3

Host: *Larix* spp.

Loc.: NW (2), C (1), SW (1)

*Inonotus circinatus* (Fr.) Gilbertson: circinatus root rot

Syn.: *Polyporus circinatus* Fr.

Disease Rating: 1

Host: *Picea glauca* (Moench) Voss

Loc.: C (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: N (1)

*Inonotus tomentosus* (Fr.) Teng: tomentosus root rot

Syn.: *Polyporus tomentosus* Fr.

Disease Rating: 1

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NC (1), NE (3)

Host: *Picea abies* (L.) Karst.

Loc.: SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1), NC (5), N (1), NE (8), AL (7), E (2), C (2), SW (2)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (4), NC (8), N (6), NE (9), E (1)

*Isthmiella* sp.: isthmiella needle cast

Syn.: *Bifusella* sp.

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (2), NC (2)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: N (1)

*Isthmiella crepidiformis* (Darker) Darker: isthmiella needle cast

Syn.: *Bifusella crepidiformis* Darker

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1), NC (1), N (1), C (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1), NC (5), N (23), NE (7), AL (3)

*Isthmiella faullii* (Darker) Darker: isthmiella needle cast

Syn.: *Bifusella faullii* Darker

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (12), NC (6), N (3), NE (4), AL (1)

*Kabatina thujae* A. Schneider & v. Arx var. *juniperi* (A. Schneider & v. Arx) Morelet:

kabatina needle blight

Disease Rating: 1

Host: *Juniperus* spp.

Loc.: NE (1), C (1)

Host: *Juniperus virginiana* L.

Loc.: NE (1), E (2), C (1), AL (2)

*Lachnellula* sp.: lachnellula dieback

Disease Rating: 2

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: N (1), NE (1)

*Lachnellula agassizii* (Berk. & M.A. Curtis) Dennis: lachnellula dieback

Syn.: *Dasyscyphus agassizii* (Berk. & M.A. Curtis) Sacc.

Syn.: *Lachnella agassizii* (Berk. & M.A. Curtis) Seaver

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (1), N (1), SW (1)

*Lachnellula occidentalis* (Hahn & Ayers) Dharne: lachnellula dieback

Syn.: *Dasyscyphus occidentalis* Hahn & Ayers

Syn.: *Lachnellula hahniana* (Seaver) Dennis

Syn.: *Lachnella occidentalis* (Hahn & Ayers) Seaver

Disease Rating: 3

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: N (1)

*Leptosphaeria* sp.: leptosphaeria needle saprophyte

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: NC (1)

*Leptosphaeria faullii* Darker<sup>20</sup>: needle cast attacker

Anamorph: *Coniothyrium faullii* Darker

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NC (1)

*Leucostoma kunzei* (Fr.) Munk: cytospora canker

Syn.: *Valsa kunzei* Fr.

Anamorph: *Cytospora kunzei* Sacc.

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: AL (1), C (1)

Host: *Larix decidua* Mill.

Loc.: C (1)

Host: *Picea* spp.

Loc.: NC (1)

Host: *Picea abies* (L.) Karst.

Loc.: AL (1), E (2), C (2), SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1), AL (3), E (7), C (10), SW (4)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (3)

Host: *Picea pungens* Engelm.

Loc.: NE (1), AL (2), E (5), C (7), SW (6)

*Libertella* sp.: juniper libertella

Disease Rating: 3

Host: *Juniperus virginiana* L.

Loc.: E (1)

<sup>20</sup> This fungus colonizes ascomata of needle cast fungi, on which it is assumed to be parasitic.

*Lirula macrospora* (Hartig) Darker: lirula needle cast of spruce

Syn.: *Lophodermium filiforme* Darker

Syn.: *Lophodermium macrosporum* (Hartig) Rehm

Anamorph: *Hypodermina hartigii* Hilitzer

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1), AL (1), C (1), SW (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (2)

*Lirula mirabilis* (Darker) Darker: lirula needle cast of balsam

Syn.: *Hypodermella mirabilis* Darker

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (3), NC (10), N (3)

*Lirula nervata* (Darker) Darker: lirula needle cast of balsam

Syn.: *Hypodermella nervata* Darker

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (7), N (4), NE (1), AL (2)

*Lophium* sp.: mussel shell fungus

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: C (1)

*Lophium mytilinum* (Pers.) Fr.: mussel shell fungus

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: N (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (2)

*Lophodermium* sp.: needle cast

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NC (2), N (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1), AL (1)

Host: *Pseudotsuga* spp.

Loc.: C (1)

*Lophodermium juniperinum* (Fr.) de Not.: juniper needle cast

Syn.: *Lophodermium juniperi* (Grev.) Darker

Disease Rating: 3

Host: *Juniperus* spp.

Loc.: AL (2), E (1), C (2)

Host: *Juniperus communis* var. *depressa* Pursh

Loc.: AL (2), C (1)

Host: *Juniperus horizontalis* Moench

Loc.: E (1)

Host: *Juniperus virginiana* L.

Loc.: AL (1), E (2), C (1)

*Lophodermium lacerum* Darker: balsam needle cast

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (1)

*Lophodermium piceae* (Fuckel) Höhnelt: spruce needle cast

Disease Rating: 3

Host: *Picea* spp.

Loc.: NC (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NC (1), N (1), NE (1), AL (1), E (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (2), N (2), NE (2), NW (1)

*Lophomerium darkeri* Ouellette: needle cast competitor

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: NC (1)

*Lophophacidium hyperboreum* Lagerb.: snow blight

Disease Rating: 1

Host: *Picea glauca* (Moench) Voss

Loc.: AL (1)

*Macrophoma* sp.: needle blight

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (1)

Host: *Thuja occidentalis* L.

Loc.: N (2)

*Melampsora* sp.: needle rust

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (2)

Host: *Larix* spp.

Loc.: NC (1), E (1)

Host: *Larix decidua* Mill.

Loc.: C (1)

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: NW (2), NC (3), N (17), NE (2), AL (3), E (2)

*Melampsora abietis-capraearum* Tubeuf: fir-willow rust

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: N (1), E (3)

*Melampsora abietis-canadensis* C.A. Ludwig ex Arthur: hemlock-poplar rust

Disease Rating: 3

Host: *Tsuga* spp.

Loc.: SW (1)

Host: *Tsuga canadensis* (L.) Carr.

Loc.: AL (2), E (8), C (3), SW (1)

*Melampsora epitea* Thüm. f. *tsugae* Ziller: hemlock-willow rust

Disease Rating: 3

Host: *Tsuga canadensis* (L.) Carr.

Loc.: SW (1)

*Melampsora medusae* Thüm.: conifer-aspen rust

Disease Rating: 3

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: NE (1), AL (4), E (1), C (2), SW (1)

*Melampsora paradoxa* Dietel & Holway: larch-willow rust

Syn.: *Melampsora bigelowii* Thüm.

Disease Rating: 3

Host: *Larix* spp.

Loc.: NE (1)

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: N (1), NE (7), AL (1)

*Melampsorella caryophyllacearum* Schröter: fir broom rust

Syn.: *Melampsorella cerastii* (Pers.) Schröter

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (25), NC (15), N (25), NE (5), AL (1), E (3)

*Melanconium* sp.: branch canker

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: C (1)

*Melanomma* sp.: spruce twig fungus

Disease Rating: 4

Host: *Picea pungens* Engelm.

Loc.: SW (1)

*Menispora* sp.: dead bark menispora

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (1)

Host: *Picea glauca* (Moench) Voss

Loc.: AL (1)

*Meria laricis* Vuill.: larch needle cast

Disease Rating: 2

Host: *Larix decidua* Mill.

Loc.: E (1), C (2), SW (8)

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: E (1)

*Micraspis acicola* Darker: needle blight

Anamorph: *Peridermium acicola* Darker

Disease Rating: 2

Host: *Picea glauca* (Moench) Voss

Loc.: N (1)

*Mycena galericulata* (Scop.:Fr.) Gray: common mycena

Disease Rating: 4

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1)

*Mytilidion* sp.: clam shell fungus

Disease Rating: 4

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: E (1)

*Nectria* sp.: nectria canker

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (1)

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: NC (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NC (1)

*Nectria cinnabarina* (Tode:Fr.) Fr.: nectria canker

Syn.: *Sphaeria cinnabarina* Tode

Anamorph: *Tubercularia vulgaris* Tode:Fr.

Disease Rating: 2

Host: *Thuja occidentalis* L.

Loc.: SW (1)

*Nidularia* sp.: bird's nest fungus

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: N (1)

*Nothophacidium abietinellum* (Dearn.) J. Reid & Cain: snow blight

Syn.: *Phacidium abietinellum* Dearn.

Disease Rating: 1

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (3)

*Oligoporus balsameus* (Peck) Gilbertson & Ryv.: brown cubical butt rot

Syn.: *Polyporus balsameus* Peck

Syn.: *Tyromyces balsameus* (Peck) Murrill

Disease Rating: 4

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: N (2)

*Oligoporus guttulatus* (Peck) Gilbertson & Ryv.: brown cubical rot

Syn.: *Polyporus guttulatus* Peck

Syn.: *Tyromyces guttulatus* (Peck) Murrill

Syn.: *Tyromyces substipitatus* Murrill

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: AL (1)

*Oligoporus sericeomollis* (Romell) Pouzar: brown cubical rot

Syn.: *Polyporus sericeomollis* Romell

Syn.: *Poria sericeomollis* (Romell) Egel.

Syn.: *Tyromyces sericeomollis* (Romell) Bondartsev & Singer

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: N (1)

*Panus rudis* Fr.: ruddy panus

Disease Rating: 4

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1)

*Peniophora pithya* (Pers.) John Eriksson: peniophora

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

*Pestalotia* sp.: needle and shoot blight

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (1)

Host: *Juniperus* spp.

Loc.: C (1)

Host: *Juniperus virginiana* L.

Loc.: SW (1)

Host: *Picea pungens* Engelm.

Loc.: SW (2)

Host: *Picea rubens* Sarg.

Loc.: C (1)

Host: *Thuja occidentalis* L.

Loc.: NC (1), NE (1), E (2), C (1), SW (5)

*Pestalotiopsis funerea* (Desm.) Stey.: needle and shoot blight

Syn.: *Pestalotia funerea* Desm.

Disease Rating: 3

Host: *Thuja occidentalis* L.

Loc.: E (2), AL (1)

*Peziza sylvestris* (Boud.) Sacc. & A. Trotter: cup fungus

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: AL (1)

*Phacidium* sp.: snow blight

Disease Rating: 1

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (1), NE (1)

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: SW (1)

*Phacidium abietis* (Dearn.) J. Reid & Cain: snow blight  
Syn.: *Phacidium infestans* P. Karsten var. *abietis* Dearn.  
Disease Rating: 1  
Host: *Abies balsamea* (L.) Mill.  
Loc.: NW (3), NC (8), N (9), NE (5)

*Phaeocryptopus gaeumannii* (Rohde) Petrak: Swiss needle cast  
Syn.: *Adelopus gaeumannii* Rohde  
Disease Rating: 2  
Host: *Pseudotsuga* spp.  
Loc.: C (3)  
Host: *Pseudotsuga menziesii* (Mirb.) Franco  
Loc.: C (1)

*Phaeolus schweinitzii* (Fr.) Pat.: brown cubical rot  
Syn.: *Polyporus schweinitzii* Fr.  
Disease Rating: 1  
Host: *Abies balsamea* (L.) Mill.  
Loc.: N (1), C (1)  
Host: *Picea abies* (L.) Karst.  
Loc.: E (1)  
Host: *Picea glauca* (Moench) Voss  
Loc.: NC (2), NE (5), AL (5), C (1)  
Host: *Picea mariana* (Mill.) B.S.P.  
Loc.: NW (1), N (1), NE (2), AL (1)  
Host: *Thuja occidentalis* L.  
Loc.: E (1)

*Phellinus pini* (Brot.:Fr.) A. Ames: red ring rot  
Syn.: *Fomes pini* (Brot.:Fr.) P. Karsten  
Disease Rating: 1  
Host: *Abies balsamea* (L.) Mill.  
Loc.: N (1)  
Host: *Larix decidua* Mill.  
Loc.: C (1)  
Host: *Larix laricina* (Du Roi) K. Koch  
Loc.: E (1)  
Host: *Picea glauca* (Moench) Voss  
Loc.: N (4), C (1), NC (1)  
Host: *Picea mariana* (Mill.) B.S.P.  
Loc.: N (2)

*Phlebiopsis gigantea* (Fr.) Jül.: peniophora gigantea  
Syn.: *Peniophora gigantea* (Fr.) Massee  
Disease Rating: 4  
Host: *Abies balsamea* (L.) Mill.  
Loc.: N (1)

*Phoma* sp.: needle blight

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NE (1)

Host: *Juniperus* spp.

Loc.: C (1)

Host: *Juniperus communis* var. *depressa* Pursh

Loc.: NW (1)

Host: *Juniperus virginiana* L.

Loc.: AL (1), E (1)

Host: *Larix* spp.

Loc.: SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (2), N (1)

Host: *Picea rubens* Sarg.

Loc.: AL (1)

Host: *Thuja occidentalis* L.

Loc.: NC (1), N (1), NE (1)

*Phomopsis* sp.: phomopsis canker

Disease Rating: 3

Host: *Juniperus virginiana* L.

Loc.: E (3)

Host: *Larix* spp.

Loc.: SW (1)

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: NW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1), SW (2)

Host: *Picea pungens* Engelm.

Loc.: SW (1)

Host: *Thuja occidentalis* L.

Loc.: AL (2)

*Phomopsis juniperovora* Hahn: phomopsis blight

Disease Rating: 2

Host: *Juniperus horizontalis* Moench

Loc.: SW (1)

Host: *Juniperus virginiana* L.

Loc.: E (1)

Host: *Thuja occidentalis* L.

Loc.: NE (1), AL (1)

*Phyllosticta* sp.: shoot blight

Syn.: *Phyllostictina* sp.

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (4), AL (1), C (1)

*Poria subacida* (Peck) Sacc.: white stringy rot

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: N (1)

Host: *Thuja occidentalis* L.

Loc.: NE (1)

*Pucciniastrum* sp.: needle rust

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (5), NC (7), N (3), SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: N (2), NE (3), E (2)

*Pucciniastrum americanum* (Farlow) Arthur: American spruce-raspberry rust

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: N (1), AL (2)

*Pucciniastrum epilobii* Oth: fir-fireweed rust

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (44), NC (32), N (46), NE (5), AL (5), SW (3)

*Pucciniastrum goeppertianum* (Kühn) Kleb.: fir witch's broom rust of blueberry

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (5), AL (1)

*Pucciniastrum vaccinii* (Winter) Jorstad: hemlock-blueberry rust

Disease Rating: 3

Host: *Tsuga canadensis* (L.) Carr.

Loc.: E (3)

*Resinicium bicolor* (Alb. & Schwein.:Fr.) Parm.: white stringy rot

Syn.: *Odontia bicolor* (Alb. & Schwein.:Fr.) Quélet

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (2), AL (1), SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: E (1), SW (1)

Host: *Thuja occidentalis* L.

Loc.: NE (1)

*Rhabdocline* sp.: Douglas-fir needle cast

Disease Rating: 2

Host: *Pseudotsuga menziesii* (Mirb.) Franco

Loc.: C (1)

*Rhabdocline pseudotsugae* Sydow: Douglas-fir needle cast

Disease Rating: 2

Host: *Pseudotsuga* spp.

Loc.: C (1)

Host: *Pseudotsuga menziesii* (Mirb.) Franco

Loc.: C (1)

*Rhinocladiella* sp.: chip pile fungus

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NE (2), AL (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: N (3)

*Rhizina undulata* Fr.: tea pot fungus

Syn.: *Rhizina inflata* P. Karsten

Disease Rating: 3

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (2), NC (2), NE (1)

*Rhizocalyx abietis* Petrak: needle blight

Anamorph: *Rhizothyrium abietis* Naumov

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: N (1), NE (1)

*Rhizosphaera kalkhoffii* Bubák: needle blight

Disease Rating: 2

Host: *Picea* spp.

Loc.: SW (1)

Host: *Picea abies* (L.) Karst.

Loc.: C (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NC (1), NE (1), AL (1), E (3), C (4), SW (3)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (3), N (1)

Host: *Picea pungens* Engelm.

Loc.: NE (2), E (1), C (3), SW (7)

*Rhizosphaera pini* (Corda) Maubl.: needle blight

Syn.: *Coniothyrium pini* Corda

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NC (8), N (14), NE (4), AL (1), C (1)

*Sarcotrichila balsameae* (J. Davis) Korf: snow blight

Syn.: *Phacidium balsameae* J. Davis

Anamorph: *Kabatiella balsameae* (J. Davis) v. Arx

Disease Rating: 1

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (7), N (3)

*Sarcotrochila piniperda* (Rehm) Korf: snow blight

Syn.: *Phacidium expansum* J. Davis

Disease Rating: 1

Host: *Picea glauca* (Moench) Voss

Loc.: NC (2), AL (1)

*Schizophyllum commune* Vaill.: Fr.: common split gill

Disease Rating: 4

Host: *Picea abies* (L.) Karst.

Loc.: C (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

*Scolecnectria cucurbitula* (Tode:Fr.) C. Booth: canker and dieback

Syn.: *Ophionectria cylindrospora* (Sollman) Berl. & Vogl.

Anamorph: *Zythiostroma pinastri* (P. Karsten) Höhnelt

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: N (2), E (1), C (1), NC (1)

Host: *Larix decidua* Mill.

Loc.: C (1)

*Scytinostroma galactinum* (Fr.) Donk: yellow stringy rot

Syn.: *Corticium galactinum* (Fr.) Burt

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (2), E (1)

Host: *Picea glauca* (Moench) Voss

Loc.: N (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1)

Host: *Picea rubens* Sarg.

Loc.: AL (1)

*Septonema* sp.: bark inhabiting septonema

Disease Rating: 4

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NE (1)

*Serpula* sp.: dry rot fungus

Syn.: *Merulius* sp.

Disease Rating: 3

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1), N (1)

*Serpula himantoides* (Fr.) P. Karsten: brown cubical dry rot

Syn.: *Merulius himantoides* Fr.

Disease Rating: 2

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1)

*Serpula lacrimans* (Wulfen:Fr.) Schröter: dry rot fungus

Syn.: *Merulius lacrimans* Fr.

Disease Rating: 2

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1)

*Sirococcus conigenus* (DC.) P. Cannon & Minter: shoot blight

Syn.: *Ascochyta piniperda* Lindau

Syn.: *Discella strobilina* (Desm.) Died.

Syn.: *Sirococcus strobilinus* Preuss

Disease Rating: 2

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1)

Host: *Picea pungens* Engelm.

Loc.: SW (8)

*Sistotrema brinkmannii* (Bresad.) John Eriksson: white stringy rot

Syn.: *Odontia brinkmannii* Bresad.

Syn.: *Trechispora brinkmannii* (Bresad.) Rogers & H. Jackson

Disease Rating: 4

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NE (1), N(1)

*Skeletocutis nivea* (Junghuhn) Keller: straw-colored decay fungus

Syn.: *Polyporus niveus* Junghuhn

Syn.: *Polyporus semipileatus* Peck

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: N (1), AL (1)

*Sphaeropsis* sp.: diplodia canker

Disease Rating: 2

Host: *Larix decidua* Mill.

Loc.: SW (1)

Host: *Pseudotsuga menziesii* (Mirb.) Franco

Loc.: C (1)

*Stemphylium* sp.: dead bark colonizer

Disease Rating: 4

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1)

*Stigminta juniperina* (Georgescu & Badea) M.B. Ellis: juniper blight

Syn.: *Cercospora juniperina* Georgescu & Badea

Disease Rating: 2

Host: *Juniperus communis* L.

Loc.: AL (1), SW (1)

*Sydowia polyspora* (Bref. & Tav.) E. Müller: needle blight

Anamorph: *Sclerophoma pythiophila* (Corda) Höhnelt

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (1)

Host: *Juniperus virginiana* L.

Loc.: E (2), C (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1), NE (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1)

Host: *Picea pungens* Engelm.

Loc.: E (1)

Host: *Pseudotsuga menziesii* (Mirb.) Franco

Loc.: N (1)

Host: *Thuja occidentalis* L.

Loc.: N (1), NE (1)

*Thelephora terrestris* Ehrh.:Fr.: smothering disease

Disease Rating: 4M

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1), N (1), E (1), SW (1)

*Thyronectria balsamea* (Cooke & Peck) Seeler: balsam fir canker

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (1), N (6), NE (1), AL (2)

*Trametes hirsuta* (Wulfen:Fr.) Pilát: the hairy conk

Syn.: *Coriolus hirsutus* (Wulfen:Fr.) Quélet

Syn.: *Polyporus hirsutus* Wulfen:Fr.

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1)

*Tremella* sp.: jelly fungus

Disease Rating: 4

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1)

*Trichaptum abietinum* (Dickson:Fr.) Ryv.: pitted sap rot

Syn.: *Polyporus abietinus* Dickson:Fr.

Disease Rating: 4

Host: *Picea glauca* (Moench) Voss

Loc.: N (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NW (1), N (1)

*Truncatella angustata* (Pers.) Hughes: needle blight

Syn.: *Truncatella truncata* (Lév.) Stey.

Disease Rating: 4

Host: *Thuja occidentalis* L.

Loc.: N (1)

*Tryblidiopsis pinastri* (Pers.:Fr.) P. Karsten: branch canker

Anamorph: *Tryblidiopycnis pinastri* Höhnelt

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NE (1), E (1)

*Tympanis* sp.: tympanis canker

Disease Rating: 3

Host: *Picea glauca* (Moench) Voss

Loc.: NC (1), NE (1), AL (1)

Host: *Tsuga canadensis* (L.) Carr.

Loc.: AL (1)

*Tympanis truncatula* (Pers.:Fr.) Rehm: tympanis dieback

Syn.: *Tympanis pinastri* Tul.

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NE (1)

*Uredinopsis* sp.: balsam fir-fern rust

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NC (1), N (2), NE (2), E (2), SW (1)

*Valsa* sp.: cytospora canker

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: AL (1)

Host: *Juniperus virginiana* L.

Loc.: E (1)

Host: *Picea glauca* (Moench) Voss

Loc.: C (1)

*Valsa abietis* Fr.: cytospora canker

Anamorph: *Cytospora abietis* Sacc.

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), NC (1), N (2), SW (1), AL (2)

Host: *Larix* spp.

Loc.: NC (1), AL (1)

Host: *Larix decidua* Mill.

Loc.: C (1)

Host: *Larix laricina* (Du Roi) K. Koch

Loc.: SW (1), AL (1)

Host: *Pseudotsuga* spp.

Loc.: SW (1)

*Valsa friesii* (DuRoi) Fuckel: needle blight

Anamorph: *Cytospora friesii* Sacc.

Syn.: *Cytospora dubyi* Sacc.

Syn.: *Cytospora pinastri* Fr.

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (4), NC (2), N (4), NE (2), AL (1), E (3), C (1)

*Valsa pini* Alb. & Schwein.: Fr.: cytospora canker

Disease Rating: 3

Host: *Abies balsamea* (L.) Mill.

Loc.: AL (1)

*Verticicladiella* sp.: black root stain

Disease Rating: 1

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (1)

*Verticillium* sp.: seedling root rot

Disease Rating: 2

Host: *Abies balsamea* (L.) Mill.

Loc.: NW (1), N (1), NE (4), AL (2), SW (1)

Host: *Picea glauca* (Moench) Voss

Loc.: NW (1), NC (1), N (1), NE (1), AL (1)

Host: *Picea mariana* (Mill.) B.S.P.

Loc.: NC (3), NE (4)

Host: *Thuja occidentalis* L.

Loc.: E (1)



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